R E P O R T R E S U M E S

ED 013 984 24 AA 000 252

RESEARCH AND DEVELOPMENT CENTER FOR TEACHER EDUCATION, THE UNIVERSITY OF TEXAS. BEHAVIORAL SCIENCE MEMORANDUM NUMBER 13, PARTS A AND B.

BY- MCGUIRE, CARSON

TEXAS UNIV., AUSTIN, RES. AND DEV. CTR. FOR ED.

REPORT NUMBER BR-5-0249-23 PUB DATE 67

CONTRACT OEC-6-10-108

EDRS PRICE MF-$0.25 HC-$2.00 48P.

DESCRIPTORS- *BIBLIOGRAPHIES, *ANNOTATED BIBLIOGRAPHIES, *TEACHER EDUCATION, *BEHAVIORAL SCIENCES, *EDUCATIONAL PSYCHOLOGY, ELEMENTARY EDUCATION, SECONDARY EDUCATION

PART A OF THIS MEMORANDUM IS AN ANNOTATED BIBLIOGRAPHY FOR INSTRUCTORS IN TEACHER EDUCATION. PART B PRESENTS AN ANNOTATED BIBLIOGRAPHY THAT IS INTENDED AS AN ADDENDUM TO "BEHAVIORAL SCIENCE RESEARCH MEMORANDUMS" NUMBERS 10 AND 12. THESE BIBLIOGRAPHIES REPORT UPON TEXTS, BOOKS OF READINGS, SELECTED JOURNAL ARTICLES, VARIOUS MONOGRAPHS, AND RECENT BOOKS UPON TOPICS PERTINENT TO TEACHER EDUCATION. THE REFERENCES WERE COMPILED BY INSTRUCTORS OF EDUCATIONAL PSYCHOLOGY COURSES AT THE UNIVERSITY OF TEXAS AND BY RESEARCH PERSONNEL OF THE RESEARCH AND DEVELOPMENT CENTER FOR TEACHER EDUCATION LOCATED AT THE UNIVERSITY. THE AUTHOR STATES MOST OF THE REFERENCES ARE RELEVANT TO THE COURSE "BEHAVIORAL SCIENCES IN EDUCATION" OFFERED AT THE UNIVERSITY FOR BOTH ELEMENTARY AND SECONDARY EDUCATION SECTIONS. (AL)

BR 5-0249-2
PA 24

RESEARCH AND DEVELOPMENT CENTER FOR TEACHER EDUCATION

THE UNIVERSITY OF TEXAS

Behavioral Science Memorandum No. 13

ED013984

This issue of the BSR Memo series reports upon texts, books of readings, selected journal articles, various monographs, and recent books upon topics pertinent to teacher education. Most of the references are relevant to a course "Behavioral Sciences in Education" (Elementary and Secondary Education sections) offered at The University of Texas. They have been compiled by instructors of Ed. Psy. 332E and 332S as well as by research personnel of the R & D Center working upon projects of the Behavioral Science Research Branch, including the Human Talent Research Program.

We owe a debt of gratitude to publishers who have supplied review copies of their recent publications as well as earlier books which had not been evaluated.

Following this cover page, the reader will find two parts--Part A and Part B--each with its own numbered pages and separate titles:

Part A Bibliography for Instructors in Teacher Education

Part B Addendum to BSR Memos 10 and 12

Most of the entries have an abstract to represent contents. A number of them also have comments to indicate the direction that teacher education is taking. The changes in outlook marking teacher education today are represented in the spring issue of the Education Newsletter as well as in Behavioral Science Research Memo No. 11 for August, 1966. To acquire some ideas about current controversies that have a bearing upon the educational encounter and which indicate areas open for further research refer to the annotation of Lee J. Cronbach (1965) in BSR Memo No. 12, page 5.

NOTE: We would be happy to publish an Addendum to BSR Memo No. 13 should our readers care to prepare rebuttals or contrary reviews to the ones expressed herein. Since some of the philosophical and other "Foundations of Education" have been neglected in this issue, we solicit reviews of journal articles, books, texts, monographs, and books of readings prepared in a manner similar to these herein. Frankly, provocative criticisms are welcome as long as they are relevant and include constructive alternatives to what the reviewed publication suggests.

AA000252

CARSON McGUIRE
Sutton Hall 308

CMcG 1966-67

RESEARCH AND DEVELOPMENT CENTER FOR TEACHER EDUCATION

THE UNIVERSITY OF TEXAS

Behavioral Science Memorandum No. 13

PART A

Bibliography for Instructors in Teacher Education

Association for Supervision and Curriculum Development. Growing up in an anxious age. 1952 ASCD Yearbook, Washington, D. C.: National Education Association, 1952. - A central idea presented by the Texas writers (pp. 122-195) is that there is "continuity in change." Although the forms of a thing or a practice may appear to change, the underlying meaning remains constant (e.g., the original wagon yard became a tourist cabin, then a motor court, and now a motel or motor inn); nevertheless, they serve the same purpose (people lodge or sleep there).

Amidon, E., & Hunter, Eliz. Improving teaching. New York: Holt, 1966. - This book is being used as one of the texts in a section of 332E. See BSR Memo #13 (Part B, page 1) for annotation.

Bandura, Albert, & Walters, Richard. Social learning and personality development. New York: Holt, 1963. - Replaces Dollard & Miller (1958) as a behavioristic explanation wherein imitation, identification, vicarious reinforcement are emphasized. See the annotated reference in BSR Memo 10-A (p. 1).

Bernard, H. W. Human development in western culture. Boston: Allyn & Bacon, 1966. - Although the author is a member of AERA, he does not appear to be a member of APA, AAA, or ASA. Nevertheless, Bernard has written a very interesting second edition of his book. Although there is no reference to Hunt (Intelligence and experience, 1961), he has the wisdom to question innate abilities and attributes. The treatment is chronological and nowhere does he clearly assert that inquiry into development involves a study of change over time, where time itself is not the variable of major concern. He employs a "needs" approach to motivation and consequently Berlyne's concept of epistemic curiosity, and White's notions about competence and current ideas regarding the "new look" in motivation are absent. Robert F. Peck (spelled Pect) is mentioned for an article he wrote at Chicago with Roth, but no mention is made of The psychology of character development (1960). The weakness of the book lies in a lack of awareness of what is taking place today in the study of cognitive behavior (e.g., see BSR Memo No. 12). The strength lies in the straightforward, coherent presentation of ideas with a persuasiveness that can intrigue a teacher-to-be, but lead her astray if the instructor fails to compensate for the basic defects in the text.

Bruner, J. S. The process of education. Cambridge: Harv. Univer. Press, 1960. - This early presentation of Bruner's ideas about education, formulated after the Woods Hole Conference of 1959, now is available as a Vintage paperback.

Bruner, J. S. Toward a theory of instruction. Cambridge, Mass: Belknap, 1966. - See Part B (p. 6) of BSR Memo 13 for our review. Also see our report of a review by Ausubel (Part B, p. 2) and a review by White included in Part A (p. 7). We understand that Vintage is going to publish the invaluable volume as a paperback.

Charters, W. W., & Gage, N. L. (Eds.) Readings in the social psychology of education. Boston: Allyn & Bacon, 1963. - Refer to entry in BSR Memo 10 (p. 4).

Church, Joseph. Language and the discovery of reality. New York: Random House, 1961. - Refer to BSR Memo 12 (p. 4-5) for annotation.

Cronbach, Lee J. Educational psychology. New York: Harcourt, Brace & World, Inc., 1963. - This text has been employed in a number of 332S sections together with an instructor's manual and a book of readings prepared by Ellis B. Page to accompany it. The treatment of school learning is effective. Although the text is looked upon as being thorough, a majority of students report that Cronbach is "heavy going."

Cronbach, Lee J. Issues current in educational psychology. In Morrisett, Lloyd N., & Vinsonhaler John (Eds.), Mathematical learning. Monogr. Soc. Res. Child Develpm., 1965, 30, No. 1 (Serial No. 99). Pp. 109-136. - Refer to BSR Memo 12 (p. 5) for more complete reference.

DeCecco, J. P. Human learning in the school. New York: Holt, 1963 (Rev. ed., 1967). - In former years, many instructors used DeCecco's book of readings in Ed. Psy. 332E and Ed. Psy. 332S. The Holt, Rinehart & Winston editor informs us that an updating revision (1967) is available.

Dinkmeyer, Don C. Child development: The emerging self. Englewood Cliffs, N. J.: Prentice-Hall, 1965.

Elam, S. (Ed.) Education and the structure of knowledge. Chicago: Rand McNally & Co., 1964.

E. T. S. Tests and measurement kit. Princeton, N. J.: Educational Testing Service, 1965.

Erikson, E. H. Childhood and society. (2nd ed.) New York: W. W. Norton & Co., 1963.

Frost, J. L., & Hawkes, G. R. (Eds.) The disadvantaged child: Issues and innovations. Boston: Houghton Mifflin, 1966. - A very valuable book for those concerned about compensatory education. See BSR Memo 13 (Part B, p. 12) for annotation.

Gallagher, J. J. (Ed.) Research trends and needs in educating the gifted: A critique. Bulletin 1965, No. 6 (OE-35056) Washington, 20402, Supt. of Documents, U. S. Govt. Printing Office (1964), price 15¢. - A very precise document which should be purchased by each teacher and student of 332.

Gallagher, J. J. Teaching the gifted child. Boston: Allyn & Bacon, 1964. - Incorrectly entered in BSR Memo 12 (p. 7) and the annotated bibliography as Teaching Gifted Children, but annotated correctly.

Gallagher, J. J. (Ed.) Teaching gifted students. Boston: Allyn & Bacon, 1965. - See annotated bibliography. Refer to BSR Memo 12 (p. 7) for annotation.

Gordon, I. J. Human development: Readings in research. Chicago: Scott, Foresman, 1965. - As a book of readings, Gordon's paperback has a good deal of competition. The volume has much to recommend it. The selection of readings has a valuable introduction on how to read the book which not only differentiates among reviews, descriptive articles, explanatory studies, and reports of experiments, but also has a readable explanation of statistical techniques. Among the research people selected are: Hunt (1960), R. W. White (1959), Bruner (1961), Guilford (1959), Moss & Kagan (1961), Piaget (1961), Elkind (1961), Lynn (1962), Harlow (1958) and Sigel (1963). They form a set of basic readings for any person who plans to intervene in child and human development.

Green, D. R. Educational psychology. Englewood Cliffs: Prentice-Hall, 1964.

Harvard Educational Review. Breakthroughs to better teaching. Cambridge, Mass.: Harv. Univer., 1965. - See Addendum I to BSR Memo 10 (p. 6) for annotation.

Havighurst, R. J., & Neugarten, B. L. Society and education. (3rd ed.) Boston: Allyn & Bacon, 1967.

Hebb, D. O. A textbook of psychology. Philadelphia: W. B. Saunders, 1966 (2nd ed.). - See BSR Memo 12 (p. 8) for annotation.

Hechinger, F. M. (Ed.) Pre-school education today: New approaches to teaching three-, four-, and five-year-olds. New York: Doubleday, 1966 (Paper, $1.45). - See annotation in Part B (p. 16) of BSR Memo 13.

Hollingshead, A. B. Elmtown's youth: The impact of social classes upon adolescents. New York: Wiley, 1949; Science Ed. Paper $2.45. - This is a classic study of adolescence in a middle western town. Elmtown is also known as Prairie City and Jonesville.

Hunt, J. McV. Intelligence and experience. New York: Ronald Press, 1961. - See annotation in BSR Memo 12 (p. 10).

Hutt, M. L., Isaacson, R. L., & Blum, M. L. Psychology: The science of interpersonal behavior. New York: Harper, 1966. - This new psychology text which gives the behavioral science perspective of psychology has been devised to complement Psychology: The science of behavior (Harper & Row, 1965) which has a natural science approach. Instructors of courses in Educational Psychology should find a great deal of material in their discussion of the meaning of interpersonal behavior (pp. 12-44) and their account of behavioral development which takes account of both biological and cultural heritages (pp. 45-83).

Isaacson, R. L., Hutt, M. L., & Blum, M. L. Psychology: The science of behavior. New York: Harper, 1965. - This introductory text in Psychology employs a natural science approach. After presenting their framework for the scientific study of behavior, they introduce the reader into what is called behavioral genetics, the human nervous system, perceptual behavior, six basic theories of learning, higher cognitive functions, and theories of motivation.

Jersild, A. T. The psychology of adolescence. (2nd ed.) New York: Macmillan, 1963. - This book emphasizes the self and employs the notion of "growth" instead of a present day concept of development. See Part B (p. 18) for annotation.

Kallenbach, W. W., & Hodges, H. M., Jr. (Eds.) Education and society. Columbus, Ohio: Merrill, 1963.

Klausmeier, H. J., & Goodwin, Wm. Learning and human abilities: Educational psychology. (2nd ed.) New York: Harper, 1966. - This book includes a tremendous amount of organized information taken from research reports relevant to 332E and 332S. See Part B (p. 19-20) for annotation.

Kneller, G. F. Educational anthropology: An introduction. New York: Wiley, 1965. - This little book provides an admirable introduction for the educator not only to the individual in society but also to the practices of education in cultural perspective: cultural integration vs. cultural diversity, enculturation, discontinuity, three views of culture--culture, personality and education; socialization.

Kogan, N., & Wallach, M. A. Risk taking. New York: Holt, 1964.

Krumboltz, J. D. (Ed.) Learning and the educational process. Chicago: Rand McNally, 1965. - See Addendum to BSR 10 (p. A-I 8) for annotation.

Lindgren, H. C. Educational psychology in the classroom. (2nd ed.) New York: Wiley, 1962. - Used by one or more sections of 332S over the past years. See BSR 13 (Part B, p. 22).

Lindgren, H. C. Educational psychology in the classroom. (3rd ed.) New York: Wiley, 1967. - In the preface to this third edition of an excellent textbook, the author clearly recognizes the current renaissance in education and asserts that a teacher has to be more of a behavioral scientist, "Today's teacher not only needs to be well grounded in subject matter and teaching methodology but he also must have a good psychological understanding of what he is doing and what is happening in the classroom as a result of his actions." Chapter 16 focuses upon "the socially disadvantaged learner" who comes from the "culture of poverty" (Oscar Lewis, Scient. Amer., Oct. 1966) but does not attend to the influences of sensory deprivation (Bruner, 1959). Although Lindgren gives a brief account of maturationist theory from Gesell's point of view (61-66), he counters it with Piaget's view of cognitive development (67-68) and the Bruner-Ausubel debate upon "readiness to learn" (299-300) wherein there is some degree of agreement. Unfortunately, the author apparently has not read Piaget's Psychology of intelligence (1951, 1966) and lets himself mistakenly interpret Piaget as advocating "cognitive development as a continuous process of unfolding." The "new look" in motivation is represented by White's

concept of competence but there is no mention of Hunt (1960), Seward (1963), or Berlyne (1960, 1965)--not of Harlow's "Mice, monkeys, men, and motives," Psychol. Rev., 1954, 60, 23-62. On the other hand, this reviewer found a summary of Walter Borg's (1964) elaborate study of ability grouping (pp. 524-532). Borg concluded that there is no basis for assuming that homogeneous grouping has any advantage over random grouping. On p. 78, Table 3-2 outlines an effective presentation of Erik Erikson's eight developmental phases. On p. 70, Lindgren asserts that "the word 'development' means, essentially, an 'unfolding'." Clearly, he has not read J. McV. Hunt's Intelligence and experience (Ronald, 1961) or Harlow's (1949) account of "learning sets." Hunt summarizes the evidence against the maturationist concept of fixed intelligence and a predetermined sequence of development. Although the term socialization does not appear in the index, there is some attention to social learning (551-553, 562-564) which does not employ the concepts of identification and imitation deftly employed by Bandura & Walters (1963). Instructors who are able to supplement the text and bring topics up to date by references to recent research tell the reviewer (CMcG) they favor the several editions of this text. Next time, Lindgren should bridge the gap between development and learning and incorporate workable concepts of motivation.

McCandless, B. R. Children and adolescents. New York: Holt, 1961 (New editon out for Fall 1967) The current edition (1961) has been employed by most sections of 332E as a consequence of its orientation and its chapters on "Learning and motivation" (4), the "Self concept" (6), "Sources of variation in measured intelligence" (8), "Socialization, sex-typing, and identification" (10), "Development of authoritarian personalities" (13), and "The middle-class teacher and the 'every-class' child" (14). The annotated references serve to bring most people up to date with regard to the deficiencies of the first edition. Many people will find it interesting to examine the 2nd edition to see the extent to which the text has been revised in the light of current emphases upon the nature of learning in the classroom (a theory of instruction?), as well as the contributions of Piaget, Berlyne, Bruner, Gallagher, and Kagan.

McDonald, F. J. Educational psychology. (2nd ed.) Belmont, Calif.: Wadsworth, 1965. - This text has drawn a number of favorable comments. See Part B (p. 25-26) for annotation.

McKeachie, W., & Doyle, C. L. Psychology. New York: Addison-Wesley, 1966. - See BSR Memo 13 (Part B, p. 26) for annotation. Those who have not completed Psy. 301 are urged to read a book such as this one as a foundation for Behavioral Sciences in Education.

McLendon, J. C. (Ed.) Social foundations of education. New York: Macmillan, 1966.

McLuhan, M. Understanding media: The extensions of man. (2nd ed.). New York: Signet Book Q-3039, 1966. - A fascinating account of the zeitgeist which has emerged as a consequence of the space age, communications which have foreshortened the "global community," and a fresh view of the nature of man.

Maier, H. W. Three theories of child development. New York: Harper, 1965. - See BSR Memo 10-A (p. 8) for annotation.

Mednick, S. A. Learning. Englewood Cliffs: Prentice-Hall, 1964.

Miller, G. A. Psychology: The science of mental life. New York: Harper, 1962. - A review of the revised edition is to be found in BSR Memo 1.

Moore, B. M., & Holtzman, W. H. Tomorrow's parents. Austin: University of Texas Press, 1965. - This report of the Texas Cooperative Youth Study provides important data about young people attending secondary schools in Texas. The volume is highly readable and could be used as a model for proposing and writing reports on research. The instruments employed in TCYS are presented and they may be used for further inquiries.

Muller, H. C., Little, C. C., & Snyder, L. G. Genetics, medicine, and man. Ithaca, N. Y.: Cornell, University Press, 1949. - Unfortunately copies of this classic work are difficult to obtain. The three distinguished geneticists proposed replacing the nature-nurture controversy with a concept of three interacting environments. See BSR Memo 13, Part B (p. 24) for annotation.

Murray, E. J. Motivation and emotion. Englewood Cliffs: Prentice-Hall, 1964.

Mussen, P. H. The psychological development of the child. Englewood Cliffs, N. J.: Prentice-Hall, 1963.

Mussen, P. H., Conger, J. J., & Kagan, J. Readings in child development and personality. New York: Harper, 1965. - See BSR Memo 13, Part B (pp. 24-25) for annotation.

Passow, A. H. (Ed.) Nurturing individual potential. Washington: A. S. C. D., 1964. - See BSR Memo 13, Part B (p. 28) for annotation.

Pelto, P. J. The study of anthropology. Columbus: Merrill, 1965. See BSR Memo 13, Part B (p. 28) for annotation.

Piaget, Jean. Psychology of intelligence. Totowa, N. J.: Littlefield, Adams & Co., 1966 (Paperback, ILP #222, $1.75). See BSR Memo 13, Part B (p. 29) for annotation.

Ripple, R. E. Readings in learning and human abilities. New York: Harper, 1964. - This book of readings has a copy of a valuable article by Jules Henry, "Attitude organization in the elementary school," pp. 330-347. See BSR Memo 13, Part B (p. 30) for annotation.

Rosenblith, J. F., & Allinsmith, W. (Eds.) The causes of behavior II. (2nd ed.) Boston: Allyn & Bacon, 1966. - The readings in child development and educational psychology selected for this second edition are highly appropriate to the behavioral science foundations of education. See BSR Memo 13, Part B (pp. 30-31) for annotation.

Scheffler, I. Conditions of knowledge. Chicago: Scott, Foresman, 1965. See BSR Memo 13, Part B (p. 32) for annotation.

Scheffler, I. Philosophy and education: Modern readings.(2nd ed.) Boston: Allyn & Bacon, 1966. See BSR Memo 13, Part B (p. 32) for annotation.

Sears, P., & Sherman, V. In pursuit of self esteem. Belmont, Calif.: Wadsworth, 1964. - This book has been selected by one section of 332E for use along with Amidon & Hunter (1966). See BSR Memo 13, Part B (p. 32) for annotation.

Shoben, E. J., Jr., & Ruch, F. L. (Eds.) Perspectives in psychology. Chicago: Scott, Foresman, 1963. - This book of readings contains Cronbach's (1957) "The two disciplines of scientific psychology," as well as a valuable orientation, "Psychological science and human understanding," by the authors. See Addendum I to BSR Memo 10 (p. 11) for annotation.

Smith, B. O., & Ennis, R. H. Language and concepts in education. Chicago: Rand McNally, 1961.

Smith, L. M., & Hudgins, B. B. Educational psychology: An application of social and behavioral theory. New York: Knopf, 1964. - The first edition of this text sets out to accomplish the objectives of Behavioral sciences in education. See BSR Memo 13, Part B (p. 34) for annotation.

Stendler, Celia B. Readings in child behavior and development. (2nd ed.) New York: Harcourt, 1964.

Stiles, L. J. (Ed.) The teacher's role in American society. New York: Harper, 1957.

Torrance, E. P. Creativity. Washington: N. E. A., 1963.

Vygotsky, L. S. Thought and language. Cambridge, Mass.: M. I. T. Press, 1962. - See BSR Memo 13, Part B (p. 38) for annotation.

Wallach, M. A., & Kogan, N. Modes of thinking in young children. New York: Holt, 1965.

Wann, K. D., Dorn, M. S., & Liddle, E. A. Fostering intellectual development in young children. New York: Teachers College Press, 1962. - See BSR Memo 10 A-I (p. 13) for annotation.

White, Mary A. The predicament of theory (Review of J. S. Bruner, Toward a theory of instruction) Teachers College Record, 68, 1, 1966 (Oct.), pp. 76-78. - "The book is a collection of essays rather than a closely woven manuscript," says Miss White. In his first essay, Bruner deals with the development of symbolism in children... pointing out that it is not language itself that makes for learning, but the use of it to represent experience.... He tells us "that there is no theory of instruction, only a body of maxims." He goes on to stress the need to teach children the skills for further learning, "most of which are symbolic ones." The reviewer says that Bruner is at his best when he deals most deeply with his notions of instruction, and asks: "Must all learning be symbolic?" The reviewer sums up by acknowledging the brilliance of the essays, but takes issue with the approach to education which is totally appealing to the intellectual gourmet, but takes too little account of the fact that there are classrooms, teachers and pupils who do not have the intellectual gourmet's appetite, stating that a theory of instruction should deal with them too. She says of Bruner: "He, at least, has stated what he believes and has actually taught it. Let his critics do the same."

Woodring, P. Introduction to American education. New York: Harcourt, Brace, 1965. - This is a selection of articles from the educational issues of Saturday Review.

Woodruff, A. D. Basic concepts of teaching. San Francisco: Chandler, 1961. Paper $2.25. - A well written introduction to teaching--uses concepts of learning, motivation, and adjustment--useful for a first course on methods of teaching.

CMcG Spring, 1967

RESEARCH AND DEVELOPMENT CENTER IN TEACHER EDUCATION

THE UNIVERSITY OF TEXAS

Behavioral Science Memorandum No. 13

PART B

Addendum to BSR Memos 10 and 12

Amidon, Edmund, & Hunter, Elizabeth. Improving teaching. New York: Holt, Rinehart, & Winston, 1966. - Practical applications of the Amidon-Flanders Verbal Interaction Category System for analysis of teacher-pupil verbal interaction are presented in this book. Motivating, planning, informing, leading discussion, disciplining, counseling, and evaluating, as teaching activities, are discussed through a series of situations. The handling of the situations is analyzed and contrasted to other ways of handling similar situations. The book is constructed so that teaching is examined, analyzed, and practiced. The authors' aim was to enable readers to better translate course work into classroom action.

Anastasi, Anne (Ed.) Testing problems in perspective. 25th Anniversary volume of topical readings from the Invitational Conference on Testing Problems. Washington, D. C.: American Council on Education (1785 Massachusetts Ave., N. W., 20036), 1966. $10.00. - Part I, Test development and use; II, Psychometric theory and method; III, Special problems in the assessment of individual differences (cultural differentials, personality testing, judgmental assessment procedures). Complete list of conference papers that have been printed and which are available in annual ETS Proceedings. The Editor's introductions to each part and section of this volume supplies an invaluable guide to the reader. The selections provide an overview of the literature and summaries of fuller reports; e.g., David G. Ryans, "Measurement and prediction of teacher effectiveness" (1958), pp. 222-237, is reported more fully in his book, Characteristics of Teachers (American Council on Education, 1960).

Anderson, C. Arnold, & Foster, Philip J. Discrimination and inequality in education. Sociology of Education, 1964 (Fall), 38, 1-18. - The authors set out to demonstrate that inequalities in educational or other opportunities do not necessarily reflect prejudice. "Discrimination is neither inequality alone, nor prejudice and intent to discriminate alone; it exists only when both these elements are present.' Sometimes classificatory criteria which reflect prejudiced stereotypes are employed to uphold differential treatment of a certain category or group. For example, a school may claim that it admits pupils or promotes them strictly "on merit." Nevertheless, if the teachers are emotionally convinced that children of "wops" inherently lack the desired qualities of mind or academic receptiveness, their judgments of merit will have discriminatory bias against children of Italian immigrants. In this summary of an UNESCO report the authors say, "Perhaps the most debatable issues center around the use of achievement 'merit' as the basis for allocating educational opportunities."

Arnstine, Donald. (Wisconsin) Curiosity. Teach. Coll. Rec., 1966 (May), 67, 595-602. - An educational philosopher (note the quotation from John Dewey in the contents, p. 555) consults the psychological literature (p. 602) for a fresh approach to what he views as a distinctive mode of behavior. He uses the term "curiosity" to refer to "the behavior of people when they are relieved of the pressures of strong needs or goals, and when they want to find things out." One of the conditions of arousal is the realization of the kinds of pressures in schools which inhibit curiosity. In other words, "pressure-creating goals" such as a strong emphasis upon acquiring a specified amount of information, or the necessity of high achievement so as to qualify for some advancement, tend to thwart curiosity. The opportunity to begin development of "wanting to find out" is greatest at a time during a program of study "when so specific results must be achieved." Leisure for curiosity to appear is not to be confused with idleness. The word "school" is derived from a Greek word meaning "leisure"--a necessary condition for study, learning, and research. "Unless paralyzed by fear or under the hypnosis of some routinized activity, organisms remain active, alert, on the "qui vive"--and tend to explore their environment.

Atkinson, John W., & Feather, Norman T. (Eds.) The theory of achievement motivation. New York: Wiley, 1966. - This discussion of basic concepts with reprints of pertinent articles, which do not include McClelland's approach to a theory of motive acquisition (Amer. Psychol., 1965, 20, 321-333), contains discussions of "behavior directed toward achievement and away from failure" (pp. 14-29) and "Expectancy x Value" theory (pp. 32-37). Persons who want to follow up on McClelland et al (1953), Atkinson (1958), and McClelland (1961) should consult this book. Unfortunately no attention is paid to recent restatements of theories of motivation, e.g., Seward (1963), Hunt (1960), White (1959), and Berlyne (1965, 1966) which have gained a great deal of acceptance.

Ausubel, David P. Neobehaviorism and Piaget's views on thought and symbolic functioning. Child Develpm., 1965 (Dec.), 36, 1029-1032. - The author asserts that analysis of Piaget's views (1950 to 1954) on the nature and development of symbolic functioning fails to support their affinity to neobehavioristic concepts of meaning (e.g., Osgood, Suci, and Tannenbaum, 1957). On the other hand, Piaget's "action theory" of thought does have much in common with neobehavioristic formulations of relational thinking (Berlyne, 1960, 1965). In fact, Piaget (1952) writes "operations are nothing but internalized actions whose efferent impulses do not develop into external movements." See the glossary of terms after the 18 references.

Ausubel, David P. (Illinois) Review of Jerome Bruner's "Toward a Theory of Instruction." Harv. educ. Rev., 1966 (Summer), 36, 337-340. - A very strong review which begins: "This is not a very important book...." Ausubel points out what he considers to be Bruner's weaknesses forcefully and candidly. Some of his points appear to be well taken; e.g., the reviewer says Bruner oversimplifies, is redundant, overemphasizes, and "rides his hobbyhorses." Nevertheless, Ausubel does point out as "the one valuable section of the book" Bruner's practical suggestions about the role of evaluation in curriculum development. After the initial astringency of a somewhat surprising criticism of the man who has been called the spokesman for the current "zeitgeist" in the behavioral sciences, a reader is forced to clarify some of his own thinking, and crystalize some reservations held but unvoiced previously. The reader should be aware that Ausubel and Bruner have not always seen eye-to-eye. Reading a review such as

this is intellectually stimulating and refreshing to a student concerned about the current educational renaissance. A person who reads Bruner's work may feel at one time or another that he is being overwhelmed by one professional voice.

Baldwin, Alfred L. (NYU) Theories of child development. New York: Wiley, 1967. - This long awaited book has been six or seven year while the author was at Cornell and active in the SRCD as well as Div. 7 (Developmental psychology) of APA. Common sense theories of child development are compared to six scientific theories; namely, (1) Kurt Lewin's field theory, (2) Jean Piaget's theory of the developmental process, (3) Freud's psychoanalytic theory, (4) S-R strategy and social-learning theory, (5) Heinz Werner's organismic view, (6) Parsons and Bales' sociological viewpoint. He summarizes by identifying areas of agreement and ten generalizations underlying the development of an integrated theory: (1) Employ a neutral, molecular, non-theoretical language; (2) partly a theory of behavior and action, partly a theory of change in behavior; (3) include hypothetical events such as thoughts, feelings of inhibitory acts; (4) multi-level functioning; (5) refine conceptualization of motivation; (6) accept the projective hypothesis that motivation produces relevant thoughts; (7) include the socialization of motives and affect; (8) examine the concept of maturation (and restate it with provision for feedback systems); (9) accept the principle of conditioning and learning through contiguity and reinforcement; (10) investigate imitation (including identification) and the discovery of new forms of behavior in the course of cognitive development. Basically an instructor's reference and for graduate students.

Bombach, Gottfried. Manpower forecasting and educational policy. Sociol. Educ., 1965 (Fall), 38, 343-374. - Bombach advocates the idea of manpower forecasting to guide educational policy; whereas educational planning in the U. S. A. emphasizes student demand for higher education. Emphasis upon student demand leads to research upon career planning, career choice, and eventually to questions about the absorption of larger numbers of college-educated persons into the occupational structure of the failure. Which occupations are going to upgrade their educational levels most rapidly? With what results? Are the present labor market mechanisms going to be adequate as a college education becomes more general, particularly when a considerable amount of job and career shifting is made necessary by the computer, automation, and the space age? Bombach's highly centralized economically oriented planning model (see "Flow Chart" on p. 351) is based upon "a concept of balanced growth." The model may not be openly accepted in America, but it should open the eyes of some administrators, research personnel, and planners.

Boocock, Sarane S. Toward a sociology of learning: A selective review of existing research. Sociol. Educ., 1966 (Winter), 39, 1-45. - Learning is defined as a (measurable) change which involves either the acquisition of some new body of information (cognitive) or a shift in values, attitudes, interests, or motivation (non-cognitive). The distinction between (1) learning something and (2) acting upon what has been learned in some way has been disregarded. Two studies of the relation between teacher classroom behavior as a reflection of basic personality type and student productivity are reviewed; namely, Cogan (1958) as well as the mimeographed Heil, Powell, & Feifer report (1960). The relative efficiency of working as a group vs. individually seems to depend upon the nature and complexity of the task as well as the composition of the group (Lorge et al, 1958). Research has not established the superiority of large or small classes (Watson, Handbook, 1963, 1031-1059). Instead, effectiveness

seems to depend upon the teacher and methods used as well as characteristics of the students. Studies of teaching method almost inevitably tend to be consistent in results--"the slight differences found usually favor whatever is designated as the 'experimental' method." (Wallen & Travers, Handbook, 1963, 448-505). Examinations not only have a built-in motivating mechanism (being tied to the academic reward structure) but also the anticipation of certain types of examination influences selection of study patterns (Bloom, Handbook, 1963, 379-397). The notion of "homogenous grouping" carried to its logical extreme on the whole-school level is the ungraded school. No one type of class organization appears to be clearly better than other types--at least not for all kinds of learning (McKeachie, 1962, pp. 337-338; Russell & Flea, Handbook, 908-914). Apparently classroom atmosphere (as presently measured) does not seem to have any consistent relation to student performance. The author suggests either that concepts and components of atmosphere, like those of teacher efficiency have not yet been adequately formulated or that relations may be more complex than studied to this point. The section on "the school as a whole" repays careful reading. The Coleman model of the school reward structure (1962) may be speculation in the light of quite different findings in the HTRP analyses. Coleman's "value climates" varied among the 10 schools he studied. Schools wherein "good grades" were valued actually were more like the HTRP schools of the 1962-63 reports. Not the "student press" and "faculty press" scales developed from the Pace-Stern CCI by D. L. Mistlewaite (College press and student achievement) J. educ. Psychol., 1959, 50, 183-191. The controversy over Coleman's (1961) book on high school climates and the influence of peer cultures upon academic commitments on colleges reported in the volume edited by Sanford (1962) are discussed on pp. 28-29 with a transition to the Wallace (1965) study of peer influences upon aspiration change. Boocock concludes "that educational programs that work against peer values are doomed to failure" (p. 31) and advises that such a potentially powerful force be used. Also note Figure C (p. 32) and Figure D (p. 33) with the discussion of outside-school influences upon student performance referring to Charters (1963), Kahl (1953), Rosen (1956), Kohn (1959), and Becker (1952) to discuss socioeconomic status (SES) mediated through values and economic deprivation as well as modes of child-rearing. Kohn (1959), for example, found that "blue collar" families emphasized obedience to parental dictates; whereas, "white collar" MC parents attempted to install internal standards and self control. The ideal for the MC child is "to act appropriately, not because his parents tell him to, but because he wants to." The other comes back to research on student peer groups in schools and colleges and asserts "that many young people will not apply their best efforts to learning tasks unless this is consistent with the norms of their informal cliques and friendship groups" (p. 41). The references are grouped by category on pp. 41-45 and are valuable to persons who want to become familiar with the literature.

Brim, Orville G., Jr., & Wheeler, Stewart. Socialization after childhood. New York: Wiley, 1966. - Although these two essays emphasize the necessity of continuing social learning in adolescence, early maturity and later life, and contain some interesting theoretical formulations, there are some serious exclusions and overemphases in the presentations. Nowhere does one find explicit attention given to the influences of age-mates who accept, reject, avoid, and/or isolate the person being socialized. In my judgment (CMcG), too much attention has been paid to formal organizations and too little attention to life experiences which make an effectively functioning person.

Brookover, Wilbur B., & Gottlieb, David. A sociology of education. New York: American Book Co., 1964. - This reviewer (CMcG) is distressed by the lack of a framework of underlying ideas about (a) the school as a social system and as an element of community structure, (b) the cultural agents which influence the processes of identification and imitation which bring about the social learning that results in socialization and acculturation, and (c) the value dilemmas which influence school people and the pupils they encounter. On page 161, the authorship of W. L. Warner & Associates (Harper, 1949) is attributed to Warner & Bailey. A hunch that the authors have not read the book is borne out by the manner in which the authors approach social mobility (pp. 179-188) contrasted with Ch. 4 in the Jonesville book. The teachers role in American society (Harper, 1957) edited by Lindley Stiles is mentioned but little use is made of its contents. Despite references to J. S. Coleman on 13 pages of the book, there is not treatment of the influence of age-mate acceptance upon academic achievement or the socialization of young people.

Bronfenbrenner, Urie. Soviet methods of character education: Some implications for research. Amer. Psychol., 1962 (Aug.), 17, 550-564. - The author introduces his readers to Anton S. Makarenko whose basic thesis is "that optimal personality development can occur only through productive activity in a social collective." Although the first collective is the family, the Soviet view is that parental authority over the child is delegated by the state. The peer collective (ideally under adult leadership) rivals and early surpasses the family as the principal agent of socialization. Socialist morality apparently is developed through an explicit regimen of activity mediated by group competition with the entire group benefitting or suffering as a consequence of the conduct of individual members. The principle methods of social control are public recognition and public criticism--explicit training and practice being provided in these activities. The author makes a number of suggestions for research comparing family- and collectivity-oriented socialization, upon the effects of group incentives, the consequences of group criticism and self-criticism. Then he sketches five hypothetically extreme types of character structure to represent five postulated patterns of socialization and moral development: (1) The self-oriented child is motivated primarily by impulses of self-gratification. (2) The adult-oriented child accepts parental structures and values as final and immutable (the oversocialized "good child."). (3) The peer-oriented child is an adaptive conformist who goes along with the group accepting shifts in group opinion or conduct (In Riessman's (1950) typology, he is "outer-directed"; in Whyte's (1956) typology, he is an "organization man."). (4) The collective-oriented person is committed to a firm and enduring set of group values (i.e., the "new Soviet man"). (5) The behavior of the objectively-principled child is guided by values which, although learned through experience in the family and in peer groups do not bind him to undeviating conformity to standards. He is the "inner-directed" personality of Riessman's typology. Some results of the studies at Cornell are summarized. Unfortunately, in their initial studies, the research team obtained too little information about experiences in peer-group settings.

Bruner, Jerome (Ed.) Learning about learning: A conference report. Coop. Res. Monogr. No. 15 (OE-12019). Washington, D. C. 20402: U. S. Government Printing Office, 1966. Price $1.00. - Working papers presented in this valuable monograph are tangible results of the Working Conference on Research on Children's Learning held at Harvard on June 14-28, 1963. The panel was organized in November, 1962, to deal with a set of recurrent issues faced by the White

House Panel on Educational Research and Development set up by President Kennedy in 1961. What is the nature of learning? How does it proceed? How can children be predisposed to engage in learning? How can the general ideas and skills acquired in one subject be learned in such a way that they will affect progress in another? How does one present materials in order to lead a learner to discover for himself? Which attitudes and emotional states help or hinder children's learning? (The reports upon attitudinal skills are gathered together in Ch. 1). The report of the group considering cognitive skills (Ch. II) suggests that there are general "Trans-disciplinary" skills (perhaps "intuitive" skills neglected in many classrooms) which are useful in diverse fields of cognitive endeavor. Ch. III focuses upon "stimulus control;" i.e., problems in the presentation of materials to be learned. Appendix A contains working papers; e.g., by Baldwin (Informational structures), R. Brown (From codability to coding ability), Bruner (Theorems for a theory of instruction), H. Levin (Child-rearing antecedents of cognitive behavior) and Suppes (The psychology of arithmetic).

Bruner, Jerome S., Olver, Rose R., & Greenfield, Patricia M., et al. Studies in cognitive growth. New York: Wiley, 1966. (A collaboration at the Center for Cognitive Studies, Harvard University). - Using a wide variety of experimental techniques, many of them illustrated in plates, figures, and with sample responses, the chapters of the book report upon six years of work examining the development of three systems for representing information--(1) through action (enactive), (2) through imagery (iconic), and (3) through the symbolism of language (symbolic). The book illustrates the manner in which the culture of a group (e.g., research associates and graduate students) can be transmitted as well as the influence of ideas originated by Jean Piaget and Barbel Inhelder. Note that the chapters begin to examine the cultural patterning of cognition.

Buros, Oscar K. The sixth mental measurements yearbook. New York: Gryphon Press, 1965. Pp. xxxvi + 1714. $32.50. - This tenth volume covers the period 1959 to mid-1964 to supplement earlier volumes. The contents (test section, book section, and indexes) evaluate 628 new tests, 445 revised or supplemented tests, 146 old tests, and "a comprehensive bibliography of all tests known to be in print as of mid-1964." The editor asserts that "no reviews worth excerpting were found for approximately two-thirds of the books" (527 listed).

Caro, Francis G. Deferred gratification, time conflict, and college attendance. Social. Educ., 1965 (Summer), 38, 332-340. - This theoretically important and concisely reported research is concerned with the extent to which middle and working class high school students perceive themselves to be involved in a time-conflict as a post-high school activity. The study is relevant to the Tumin-David debate over merits of the Davis-Moore functional theory of stratification--that positions which "have the greatest importance for society and require the greatest training and talent' (the 'mining' view of talent) have the highest ranks. Design, nature of analysis, findings (see Table 1), discussion and interpretation indicate what a dissertation research may accomplish. This one should be replicated by a budding behavioral scientist. Apparently, respondents in Caro's St. Paul sample of 71 working class and 73 middle class boys did not regard the college years as periods of sacrifice (Girls were not included). With regard to the male sex role, at least, the study suggests "that the deferred gratification concept should be used with caution as an explanation of class differences in the activities of young persons." Further research is suggested on a variety of related problems.

Castellan, N. J., Jr. On the partitioning of contingency tables. Psychol. Bull., 1965 (Nov.), 64, 330-338. - The chi-square test has appeal since it requires only the "counting" of observations and subsequently placing them into mutually exclusive and exhaustive categories which form the "cells" of a contingency table which has marginal frequencies for each row and column (cf. Table 1). Comparisons analogous to analysis of variance may be made by subdividing contingency tables in a special manner giving rise to additive independent components (tables 2 to 10). Partitioned X^2s are not correlated (like X^2s for arbitrary 2 x 2 tables). Thus, they can be interpreted independently, allowing meaningful inference. A very clear explanation of chi-square analysis is provided in G. W. Snedecor, Statistical methods, 4th ed. (Iowa, 1946) but is not found in the fifth edition (1956).

Chapanis, Alphonse. Men, machines, and models. Amer. Psychol., 1961 (Mar.), 16, 113-131. - "Models are analogies"... They involve playing "make believe"... to understand complex systems or events (e.g., Fig. 7. A symbolic model of a communication system). The author points to some dangers in the use of models (overgeneralization, errors in assumption, often not validated, divert useful energy into non-productive activity). "Unfortunately, the easiest problems to build models for are essentially unimportant problems." Each person has to decide for himself!

Cheong, G. S. C., & DeVault, M. Vere. Pupils' perceptions of teachers. J. educ. Res., 1966, 10, 446-449.- This pilot project supported by NIMH funds involved 536 children in different parts of the USA (grades 2-6). High discrepancies between pupils' perceptions of their actual teachers and their perceptions of "ideal" teachers was associated with low achievers, boys more often than girls, pupils of low sociometric status, negative attitudes to school, and aggressive self-concepts (chi-square tests)--pupils whom schools oftentimes are thought to be serving inadequately.

Cohen, Elizabeth G. Parental factors in educational mobility. Sociol. Educ., 1965 (Fall), 38, 404-425.- The article summarizes a Ph.D. dissertation completed at Radcliffe in 1958. Instead of a matched-pair design, one would employ random samples and either covariance analysis to "control" for family status and IQ, or applied multiple regression procedures as taught in Ed. P. 384. The results of this study indicate that the origin of mobility aspiration is a long-term process involving two types of parental motivation: (1) vocational orientation (fathers) and (2) status orientation (mothers). No attention was paid to agemates.

Cohen, Shirley. The problem with Piaget's child. Teach. Coll. Rec., 1966 (Dec.), 68, 211-218.- For the person who has read Piaget's work in the original (e.g., Psychology of intelligence, 1950 and 1966; J. educ. Psychol., 1961, 52, 275-281), this can be a provocative article. The author relates Piaget's concepts and ideas about child development and behavior to current psychological concepts and issues in that field (e.g., effectance motivation and competence; personal style of interaction; consequences of sensory deprivation; intrinsic learning). She does not refer to the transformations or to the process of equilibration discussed in Piaget's 1961 article. The latter notion is represented by the concept of three interacting environments--genetic, internal or neuro-endocrine, external or nutritional-social (Muller, Little, & Snyder, 1949). The author observes that "children with learning problems most often come

from environments where extrinsic motivation is the rule" and that Piaget's theory applies best in those instances where "needs for emotional security are being adequately met" (p. 217).

Conant, James C. The American high school today. New York: McGraw-Hill, 1959; Signet (1964). - A full account of the most effective educational practices found in the United States with recommendations for improving secondary education, p. 55-56 (Signet).

Cook, Stuart W., & Sellitz, Claire. A multiple-indicator approach to attitude measurement. Psychol. Bull., 1964 (July), 62, 36-55. - Observed discrepancies between actual behavior toward a social object and that predicted from a given instrument have been "explained" by assuming there are different "classes" of attitudes; e.g., verbal attitudes and action attitudes. In addition, other characteristics of the individual and the situation have to be taken into account. The authors examine situational responses, role-playing behavior, and sociometric choices as behavioral approaches to supplement self-report scales, believing the behavioral measures less susceptible to distortion. They also consider measures based upon inferences drawn from the individual's reaction to partially structured stimuli as well as performance of "objective tasks." The several approaches may supply a basis "for estimating common underlying dispositions." This article may become as important as Quinn McNemar's "Opinion-attitude methodology," Psychol. Bull., 1946, 43, 289-374.

Corwin, Ronald G. Militant professionalism, initiative and compliance in public education. Sociol. Educ., 1965 (Summer), 38, 310-331. - A report upon an USOE-supported project, No. 1934 (The development of an instrument for examining staff conflicts in the public schools). Laymen have delegated much of their traditional authority over teachers to administrators of complex educational bureaucracies. Thus, the traditional image of the teacher as "public servant" of the local community has been transformed into a bureaucratic-employee role which tends to be in conflict with the professional role wherein one demands increasing autonomy over what one does. Professionalization actually is a drive for status since it represents the efforts of some member of a profession to control their work. Corwin takes the position that teachers are attempting to professionalize. He hypothesizes that there will be evidence of militancy among the professional segments of the profession. Militancy may have other sources; e.g., personal alienation, identification with a labor movement (rights of the individual worker). Two Likert-type scales were constructed after a sample of 146 teachers in seven high schools which had 426 teachers (284 of whom had returned questionnaires). The sample was used to test hypotheses and to "try out" the Professional-Status-Orientation (16 items) and Bureaucratic-Employee Status-Orientation (29 items) scales--sample items are given on p. 317. Fig. 1 shows a typology of initiative and compliance. Three tables organize the data. Summary and implications on pp. 329-333).

Costello, Timothy W., & Zalkind, Sheldon S. Psychology in administration: A research orientation with integrated readings. Englewood Cliffs, N. J.: Prentice-Hall, 1963. - The book is designed to introduce the reader to elements of human motivation and thinking concealed in traditional administrative theory as well as to prepare a student of administration so that

he may extract meaning from the professional literature of psychology. The six parts, with their texts and readings, move from intrapersonal through interpersonal approaches: (1) Perceiving people and situations; (2) Needs, motives, and goals; (3) Reactions to stress, frustration, and conflict; (4) Effecting changes in behavior: the learning process (largely Skinnerian operant behaviorism); (5) Thinking: problem-solving, decision-making, and creativity. In addition to the reprinted readings, the authors provide a bibliography of references in the text material of each of the six parts (pp. 465-486). Persons in business administration, educational administration, nursing administration, and those curious about the application of psychology to another discipline should find this book rewarding reading and quite thought-provoking.

Cuber, John F., & Harroff, Peggy B. The significant Americans: A study of sexual behavior among the affluent. New York: Appleton-Century, 1965. - The book is an outcome of interviews with 437 adults, 235 men and 202 women, at the time when 406 were married and 31 unmarried. The subjects represented all faiths as well as being influential, policy-making individuals in their communities. By and large they are upper-middle class in status. Interview material is employed to classify and communicate "what ought to be," "what really is," and "what I see and feel"--the three worlds of man-woman relations reported by a selected segment of American society. The book is an excellent example of the use which can be made of interview data or observations where there are securring patterns to be reported and classified. The investigators already have won the necessary regard from their peers to ensure a belief in what they have reported.

de Charms, Richard, & Moller, G. H. Values expressed in children's readers. J. Abnorm. Psychol., 1962, 64, 136-142. Reprinted in Byrne, Don & Hamilton, M. L. (Eds.), Personality research. Englewood Cliffs: Prentice-Hall, 1966. - The article investigates the psychological variables associated with observed cultural changes in the U.S. The basic trend is from inner-direction (Weber's "Protestant ethic") with a basic component of achievement motivation to other-direction (Whyte's "social ethic") with affiliation motivation as a basic component. The predictable decline of achievement motivation (Riesman) is supported by Strauss and Haughton (1960) and McClelland (1955). The hypotheses revolved around the decline of achievement motivation and moral teaching in children's readers from 1800-1950 with interesting confirming results clearly illustrated with two figures (pp. 269-270) and a statistical table (p. 269). The predicted decline is most marked after 1900. (24 rererences)

Dentler, Robert. The Center for Urban Education. Sociol. Educ., 1966 (Spring), 39, 208-211. - The Deputy Director of this new R & D Center which aspires to become a regional education laboratory began with funds from foundations and USOE in Sept., 1965. The Center (located at 33 W. 42nd Street, New York City, N. Y. 10036) is an independent and non-profit organization with an inter-university base which may be extended to affiliate with other institutions. The Urban Review is published monthly by the Center's Laison Office, David Outerbridge, Director.

Dentler, Robert A., & Mackler, Bernard (Kansas) Mental ability and sociometric status among retarded children. Psychol. Bull., 1962 (July), 59, 273-282. - The authors accept the ideas that interpersonal environment is a powerful determinant of development and that peer group relations are important elements in the interpersonal environment. Table 1 summarizes some

major studies of "normal" children and Table 2 does the same for "retardates" (institutional and noninstitutional). The review suggests that a moratorium be declared upon studies of the relations between intelligence and sociometric status among children since the relationship has been demonstrated to hold whether the subjects are gifted, normal, or mentally retarded, with samples ranging from 15 to 500, across a wide age range, and with the use of different instruments.

Ebel, Robert L. Must all tests be valid? Amer. Psychol., 1961 (Oct.), 16, 640-647. - An excellent review of concepts of validity. Ebel questions whether test validity is essential and argues that the concept is scientifically weak and philosophically a naive faith in the preexistence of a quantity to be measured. Ebel reminds his readers that predictability to a criterion, meaningfulness of a score in terms of interpretability, as well as relatedness to other measures actually are the essential expectations one should have for test scores.

Ecklund, Bruce K. A source of error in college attrition studies. Sociol. Educ., 1964 (Fall), 38, 60-72. - The author provides a valuable survey of the literature and reports upon an investigation which traced the academic careers of Illinois freshmen for ten years. He concludes that some of the predictive items and self-reported reasons which usually are associated with early attrition fail to predict the return and graduation of the dropout (perhaps at another college). Some items not associated with early dropping out appear to be correlated with later careers. In some instances, the power of an item to predict ultimate graduation failed to hold up when allowance was made for college dropouts who came back. Five tables summarize data from Illinois and other sources.

Erikson, Erik H. (Ed.) The challenge of youth. New York: Doubleday Anchor A-438, 1965. $1.45 (originally published as Youth: Change and challenge by Basic Books, 1963, and in the Winter 1961-62, by Daedalus (the journal of the American Academy of Arts and Sciences). - Most readers will be provoked to thought and discussion upon reading Erikson's "Youth: Fidelity and diversity," pp. 1-28; Bettelheim's "The problem of generations," pp. 76-109; and Parsons' "Youth in the context of American society," pp. 110-141; as well as Ambassador Goldberg's "Technology sets new tasks," pp. 143-154.

Ferguson, George A. On learning and human ability. Canad. J. Psychol., 1954, 8, 95-112. - Conceptual framework relating two fields of inquiry: learning and human ability... features of theory: (1) The abilities of man, including the reasoning, number, perceptual, and spatial abilities, and whatever is subsumed under intelligence, are attributes of behavior, which through learning have attained a crude stability or invariance in the adult... as they develop in the child... exhibit considerable stability over limited periods of time at particular age levels. (2) Biological factors in the formation of ability are not excluded... fix limiting conditions... within these boundaries, the range of variation in ability attributable to learning is substantial.... Thus, emphasis is diverted from biological to environmental (experiential) determination in the formation of ability (cf. Hunt, 1961, pp. 66-108). (3) Cultural factors prescribe what shall be learned and at what age... different cultural environments lead to the development of different patterns of ability. Those abilities which are culturally valid, and correlate with numerous performances demanded by the culture, are those that show a marked increment with age. (4) Abilities emerge through a process of differential transfer and exert their effects differentially in learning situa-

tions. Those that transfer and produce their effects at one stage of learning may differ from those at another (Hunt, 1961, p. 302). (5) The concept of a general intellective factor, and the high correlation between many psychological tests, are explained by the process of positive transfer, the distinctive abilities which emerge in the adult in any culture being those that tend to facilitate rather than inhibit each other. LEARNING ... a process whereby the abilities of man become differentiated; this process at any stage being facilitated by the abilities already possessed by the individual.

Fishman, Joshua A. (Yeshiva U.) A systematization of the Whorfian hypothesis. Behav. Sci., 1960 (Oct.), 5, 323-339. - The Whorfian hypothesis holds that the characteristics of language have determining influences upon cognitive processes. The author provides a brief historical introduction. Whorf considered language structure not only as interactingly reflective of "cultural thought" but also as directly formative of "individual thought." Four levels of the Whorfian hypothesis are shown in figure 1 and discussed in the text. Whorf (1940) wrote: "All real scientists have their eyes primarily on background phenomena in our daily lives; and yet their studies have a way of bringing out a close relation between these unsuspected realms... and... foreground activities."

Fiske, Donald W., & Butler, John M. The experimental conditions for measuring individual differences. Educ. psychol. Measmt., 1963 (Summer), 23, 249-266. - This article should be read after consulting the authors' chapter in Ann. Rev. Psychol., 1955, 6, 327-356, and followed by a reading of a recent article by Fiske (Homogeneity and variation in measuring personality), in Amer. Psychol., 1963 (Oct.), 18, 643-652. They refer back to basic literature upon measurement, "the assignment of numerals in accordance with certain rules." After considering the conditions for measuring ability (typically estimated from performance at a crude limit of learning), they go on to discuss operations for measuring personality which differ considerably from those for measuring personality (although the S's responses are a product of his past experiences, he is not exercising a well-practiced function, nor is he working toward a limit). Compared to ability scores, measures of personality (1) typically are less stable over time, (2) have lower internal consistency, and (3) have lower correlations with other behavior which has been assessed independently and by other means. A good deal of the discussion centers upon the proposition, "Any procedure for determining indivudual differences should be viewed as an experiment."

French, John D. The reticular formation. Scient. Amer., 1957, 196, 55. - This article contains a valuable diagram of the brain in the human skull showing the position of the reticular formation. The reticular activating system (RAS) is intimately related to sleep, arousal, and attention. The RAS network of fibres and cell bodies constitutes one of two general routes travelled by sensory impulses on the way to the cortex. The other route, the sensory relay nuclei of the thalamus, is the direct route. The RAS and the cerebral cortex form a closed loop in which impulses in the RAS arouse the cerebral cortex, and those in the cortex in turn arouse the RAS. According to Lindsley (1960) the hypothalamus and brain-stem portions of the RAS together form one waking center (Morgan, 1965, pp. 41-45, 341-356). Closely related to the brain-stem RAS are a group of nuclei which project diffusely to the cerebral cortex, the diffuse thalmic projection system (DTPS) which has phasic functions.

Friedenberg, Edgar Z. The vanishing adolescent. Boston: Beacon Press, 1959; New York: Dell Paperback, 1962 (No. 9276, 50¢). - This reviewer (CMcG) encountered the author as a graduate student at Chicago. Although EZF completed a doctorate in education, he is now a Professor of Sociology at California (Davis). The book is based upon a thorough understanding of current literature supplemented by observations, interviews, and sentence completion data represented in Chapter 5, "Five exemplary boys," pp. 146-174. Friedenberg notes that the crucial developmental task of adolescence is self-definition, "Adolescence is not simply a physical process; there is more to it than sexual maturation. It is also--and primarily--a social process, whose fundamental task is clear and stable self-identification." The author speculates upon two aspects of development which he believes contribute most to clear self-definition; namely, the capacity for tenderness which comes with puberty, and respect for competence in oneself and others (pp. 39-40). Pay attention to the consequences of "interpersonal denigration" (Jules Henry's "carping criticism") in the juvelile era (pp. 45-47). Also note references to "the experience of unconditional acceptance in early adolescence," "masculine self-imagery," and "socialization within the peer group" (pp. 50-59). He believes that adolescence is being swallowed up by childhood at one end and by the precociousness of youth at the other. Note also an indictment of the high school (e.g., pp. 1-12) in the introduction by David Riesman as "a sorting station for academic aptitude, ... a monitor for conduct and personality"--illustrated in the author's chapter upon "The establishment of self-esteem" (pp. 106-145).

Frost, Joe L., & Hawkes, Glenn R. (Eds.) The disadvantaged child: Issues and innovations. Boston: Houghton Mifflin, 1966. In his Foreword, Professor Samuel A. Kirk, noted for his research in the area of exceptional children, provides three main reasons for the emphasis being placed upon anti-poverty programs and compensatory education. Unfortunately, he does not recognize the primary reason; namely, the recognition of the fact that our long-held belief in fixed intelligence and predetermined intelligence no longer is tenable. One of his colleagues, J. McV. Hunt, in Intelligence and experience (Ronald, 1961) summed up the evidence which destroyed the maturationist view and made possible a workable conception of compensatory education involving planned interventions in the lives and learning experiences of young people. The editors recognize this change in their "Overview and Recommendations" (pp. 1-12). By and large, the readings are well chosen. They include selections by R. J. Havighurst (15-25), Frank Riessman (45-50), Hunt (83-95), Pettigrew (Negro-American intelligence, 96-115), Bruner (Cognitive consequences of early sensory deprivation (137-145); Jules Henry (394-399), and Hess (406-418).

Gage, Nathaniel L., Leavitt, George S., & Stone, George C. Teachers' understanding of their pupils' ratings of their teachers. Psychol. Monogr. 69, 21, No. 406, 1955. - A report of a research study based on the proposition that teachers should understand their pupils. The research was carried out with 103 fourth, fifth, and sixth grade teachers. Tests were correlated with pupils' descriptions of teacher behavior on both a forced-choice and an unforced-choice rating scale in three areas of educational concern; namely a) cognitive, b) social, and c) personal problems.

Gagne, Robert M. (Pittsburgh, U. Cal., Berkeley) The conditions of learning. New York: Holt, Rinehart & Winston, 1965; $6.50. - The intent is to provide a "fairly comprehensive" and selectively documented answer to the question of applying a psychology of learning to the improvement of educational programs. Gagne's system is neobehavioristic (associationistic,

hierarchical, combinatorial) yet sympathetic to cognitive maps (in Tolman's sense). Learning is viewed as "a change in human disposition or capability which can be retained," and not ascribable to development. For Gagne, principles apparently are if-then relations which combine concepts. A hierarchy of principles form organized knowledge. A strategy is a special case of self-instructed principles. Gagne has also edited a symposium for the Learning Research and Development Center at The University of Pittsburgh, Learning and individual differences (Columbus, Ohio: Chas. E. Merrill Books, Jan. 1, 1967). After considering the contributions of a number of psychologists (for example, Glaser, Cronbach, R. C. Anderson, Maltzman, Glanzer, Fleishman), A. W. Melton comments upon the R-R_1 S-R, and information-processing (IP) approaches in a concluding chapter.

Gagne, Robert M. The learning of concepts. School Rev., 1965 (Autumn), 73, 187-196. - Gagne notes that school learning is largely conceptual in nature, and that there is great variation in the ways that the term "concept" is used by educational writers. Accordingly there are a variety of descriptions of ways students learn concepts. He distinguishes between two important kinds of phenomena: (1) concept learning--acquiring a common response to a class of objects varying in appearance; (2) principle learning--a combining of concepts into entities variously referred to as "ideas," "facts," "principles," or "rules." Then he goes on to show the manner in which they represent two different kinds of learned capabilities. He weighs the value of discovery learning (active) in contrast to reception learning (passive).

Gardner, Riley W. A psychologist looks at Montessori. Elem. School J., 1966 (Nov.), 67, 72-83. - An interesting article comparing the developmental psychology of Piaget to the methodology of M. Montessori. Gardner sees the Montessori method favorably, especially as it deals with children in the sensorimotor stage (Bruner's enactive representation) but cautions that regardless of the cleverness of Montessori methods, they cannot be expected to provide all the requirements of optimal cognitive development. Several types of children are discussed: active-passive child and studies of twins, as well as explorations of individuality and a superficial discussion of imprinting. Thirteen of twenty-eight references are to Gardner's own writings. Nevertheless, for a novice, this is an article well worth reading providing one reads further for understanding.

Gallagher, James J. (Ed.) Research trends and needs in educating the gifted: A critique. Bulletin 1965, No. 6 (OE-3506). Washington, D. C. 20402, Supt. of Documents, U.S. Govt. Printing Office (1964), price, 15¢. - This valuable report of a conference held at Wisconsin in the fall of 1962 defines giftedness, identifies factors in cognitive development, considers the culturally disadvantaged, and proposes some research strategies. Notice that the proposed definition of a genius as: "the person who does easily what no one else can do at all," and the multidimensional nature of intellectual talent which are held to be capable of modification, and closely related to motivational as well as personality variables.

Glass, G. V., & Maguire, T. O. Abuse of factor scores. Amer. educ. res. J., 1966 (Nov.), 3, 207-304. - The authors demonstrate that weighting scores on variables by their rotated factor loadings can lead to correlations among "factors in persons." The HTRP and R & D procedures employ the beta weights obtained for each indicator when the factor is regressed upon each variable in the original matrix. Factor scores for each subject obtained by this procedure (by means of an appropriate computer program) have been shown to be uncorrelated.

Getzels, Jacob W., & Jackson, Philip W. (Chicago) A study of giftedness: A multivariate approach. The gifted student. Cooperative Research Monograph No. 2. Washington, D. C.: Government Printing Office, 1960. Pp. 1-18. (Order No. OE-35016, $.35). - I. Social context of giftedness--"Outstanding Traits Test"--IQ, creativity, good marks, goal-directedness, social skill, moral character, emotional stability (13 attributes). Although they defined gifted children in much the same terms, teachers appear to want them in the classroom; parents seem not to want them in the family. Relationship between qualities defining giftedness and those essential for success is nil for teachers, low for parents. Youth aspire for qualities predictive of success. II. Highly creative and highly intelligent adolescents--449 Ss-- 3 IQ tests, 5 creativity (word associations, uses for things, hidden shapes, fables, make-up problems)--HC and HI groups; school achievement, teacher preference ratings, n Ach scores and categories of fantasy production. Creativity lies in the ability to produce new forms, the aptitude for achieving new meanings having social value ("divergent" vs. "convergent"), a rich and available fantasy life. Despite IQ differences, HC and HI achieved equally; HI were preferred by teachers; no differences in n Ach; HC higher in stimulus-free, humorous, and playful themes. III. Occupational choice and cognitive functioning--26 HC and 28 HI Ss--2 SCTs, 3 OT and parent questionnaire. HC were more autonomous and HI more "compliant" or "realistic." "Failure to distinguish between convergent and divergent talent in our schools may have serious consequences for the future of our society." ... "unwise to think of divergent fantasy as simply rebellious, rather than germinal...(Psychological health, moral character not studied.)

Gill, Merton. The present state of psychoanalytic theory. J. abnorm. soc. Psychol., 1959 (Jan.), 58, 1-8. - Uniquely characteristic of psychoanalysis is the kind of motivation it postulates: drives rooted in the biology of the organism. Now, psychoanalysis envisages a complex hierarchy of motivations which involves a progressive taming of drives (urging energies connected with bodily behavior) with advancing development and is accompanied by a progressive infusion of the drive representations with cognitive elements reflecting external reality (David Rapaport, The conceptual model of psychoanalysis. J. Pers., 1951, 20, 56-81). The problem of the relative roles played by and the relationships between intrapsychic, interpersonal, and social factors is subject to much controversy but the heaviest stress is upon intrapsychic elements. Learning has come to occupy a more central role in psychoanalytic, just as in general psychological, theory in contrast to maturation. Psychoanalysis apparently is becoming more concerned with (a) ego psychology--an ego coping with a real external world; (b) increased attention to the environment; and (c) the introduction of cognitive and adaptive considerations as well as motivational ones.

Golann, Stuart E. Psychological study of creativity. Psychol. Bull., 1963 (Nov.), 60, 548-565. - Issues: (a) What is creativity? (b) How does it occur? (c) Under what conditions is it manifest? Emphases: products (C. Taylor), process (M. Stein), measurement (Guilford, et al), personality (Golann), creativity motive (Barron, Mackinnon, Anne Roe). Read the closing "critical overview" and note the references.

Goldbergh, Stephen J. (Ed.) The experiences of adolescence. Cambridge, Mass.: Schenkman, 1965 (Paperback SK-11: $1.95). - This paperback contains a series of provocative "personal documents" calculated to provide thought and discussion. Instead of using section headings such as "Identity," "Aggression," "Independence," "Sexuality," "Guilt," and "Experiencing of Success

and Failure" the author uses a series of titles in no particular order which are in a random sequence. No attempt is made to explain or interpret the material, thus the anecdotal instances may be used as examples by the student, or as catalysts for discussion involving instructors and students.

Goldstone, Sanford, & Goldfarb, Joyce L. (Baylor Med.) Adaptation level, personality theory, and psychopathology. Psychol. Bull., 1964 (Mar.), 61, 176-187. - The broad AL schema advanced by Harry Helson (Amer. J. Psychol., 1947, 60, 1-29) as a frame of reference for the prediction of psychophysical data (AL = f) (central stimulus, background factors, residual of experience) offers a possible general psychological point of departure to a theory of personality. Also see Helson, Harry. Adaptation-level theory: An experimental and systematic approach to behavior (Harper, 1964), especially pp. 551-710.

Goodlad, John I. (Ed.) The changing American school. 65th N.S.S.E. Yrbk., Part II Chicago: Univ. Chicago Press, 1966. - The yearbook is divided into three sections: (I) Illustrative changes in schools, (II) Forces and ideas influencing the schools, (III) Critique. With reference to the social-cultural transformation influencing the schools, Dean Chase (pp. 269-306) asserts "that the bomb, the perfection of rockets and missles, the dramatic competition in space exploration, the most recent electronic and cybernetic developments are all surface manifestations--frequently misleading--of the thrust generated by man's inherent curiosity equipped with rapidly elaborated technologies for discovering and applying knowledge." He counsels, "Too often the implicit assumption seems to be that the adaption of a new form of organization, technique of instruction, or way of grouping learners is in itself an indication of progress and, therefore, to be applauded." He believes that a case can be made for "the concept of learning as a process of active inquiry and of the human individual as naturally inclined to seek meaning and to develop his powers in confrontation with the environment. Some of the chapters provide a reader with an orientation and basic references; e.g., John Goodlad (The curriculum), R. W. Tayler (Behavioral sciences and the schools), Robert Glaser (The design of instruction), and W. K. Frankena (Philosophical inquiry).

Goodnow, Jacqueline J. A test of milieu differences with some of Piaget's tasks. Psychol. Monogr., 1962, 76, No. 36 (Whole No. 555). - In Hong Kong, a group of Chinese children with no schooling did as well as European schoolchildren when they responded to Piaget's tasks for conservation of weight, volume, and surface (e.g., consult Brown, 1965, pp. 198-207; or Hunt, 1961, pp. 226-229). In contrast, the Chinese boys who had not attended school were markedly less effective than the schooled Europeans upon another Piaget task--one of combinatorial reasoning. This task demands that the child, after making pairs of three and four colors, work out in advance a system to cover all possible pairs of six colors. (The conservation tasks required that the child see one property of an object--for example, its weight--as remaining invariant in spite of a change in shape of the objects.) In addition, the unschooled Chinese were much poorer than the Europeans on Ravon's Progressive Matrices. The latter usually are regarded as a measure of general intelligence. The test may, however, be unreliable for the unschooled children.

Harlow, Harry F., & Harlow, Margaret K. Learning to think. Scient. Amer., 1949 (Aug.), 198. Reprinted No. 415 by W. H. Freeman and Co., 660 Market St., San Francisco 4, Calif. - Some psychologists have believed that human beings are born with certain powers of reason. The authors present the view that all such functions first have to be learned.

Hechinger, Fred M. (Ed.) Pre-school education today: New approach to teaching three-, four-, and five-year olds. New York: Doubleday, 1966 (Paper, $1.45). - The Education Editor of The New York Times (Passport to equality, pp. 1-12) introduces this highly recommended volume of basic readings to orient those who would rapidly develop what has been called pre-school education, "Head Start" programs, and what certainly is going to be incorporated into primary education in elementary schools. For the slum or "underprivileged" child, in terms of real or potential retardation, the most serious harm already has been done by the time he reaches what for the privileged child (UM, LM) would be nursery school age. As the Editor points out, "The stage is set, not for learning, but for frustration." The idea of pre-school education for deprived children is based upon the premise that an early start has to be made to offset lack of parental teaching, care (TLC), and mind-molding. (Bruner's 1959 paper upon sensory deprivation is not mentioned.) The Editor concludes "The time for pre-school experimentation is doubly right. That it is needed for the sake of the excluded and deprived is self-evident... the movement is gaining momentum at the very moment when educational psychologists are offering persuasive evidence that all children can learn--and often want to learn--much more, much sooner... a lifesaving device for those at the bottom of our society's ladder may, in time, help to loosen the rigidity of the educational structure as a whole. The selections in this volume originated with the Council for Public Schools, Inc., 16 Arlington Street, Boston, Mass. Some authors adapted earlier publications for inclusion: Martin Deutsch (Early social environment: Its influence on school adaptation, pp. 13-24); J. McV. Hunt (The psychological basis for using pre-school enrichment as an antidote for cultural deprivation, pp. 24-72, particularly pp. 56-61--and notice the thorough bibliography); again Martin Deutsch (Facilitating development in the pre-school child: Social and psychological perspectives, pp. 73-95, particularly pp. 88-90 on "language difficulties"); Shirley Feldman (A pre-school enrichment program for disadvantaged children, pp. 97-104); Carl Bereiter et al., at Illinois (An academically oriented pre-school for culturally-deprived children, pp. 105-135, containing recommendations for "teaching reading as a practical process," pp. 129-135); Margaret Lipchik (A saturday school for mothers and pre-schoolers, pp. 138-143). The Appendix contains a working list of useful books and articles upon pre-school programs and socially-disadvantaged children (pp. 145-150). Again, this paperback at $1.45 is invaluable for teachers of primary grades, for principals and supervisors, for students of educational psychology, and for research personnel.

Henry, Jules. Attitude organization in elementary school classrooms. In G. D. Spindler (Ed.), Education and culture. New York: Holt, Rinehart & Winston, 1963. Reprinted from The Amer. J. Orthopsychiat., 1957 (Jan.), 27, 117-133. - The elementary classroom is a powerful instrument for organizing the emotions and attitudes of prepubertal children toward a dynamically "interrelated attitudinal structure supportive of the culture" (p. 193), though children at this point focus emotions and attitudes upon peer groups and parents. The witch-hunt syndrome (intragroup aggression) in the classroom is a reflection of a phenomena of American culture which finds pathological purity of expression in aggression (Starkey, 1949). The syndrome is a dynamically interrelated system of feelings and actions, involving destructive criticism, docility, feelings of vulnerability, fear of intergroup hostility, confession of evil, boredom, and emptiness. The syndrome can occur spontaneously--often from competition, but for continuance, demands teacher support. Classroom docility appears to be a result of children needing substitute gratification and their inability to confront real issues. By injecting conflicts into the lessons, children fail to "get the point." In the middle-class classroom, children compete with each other. The teacher, by directing their hosility away from himself, rein-

forces the competitive dynamics of the middle class. In the lower-class classroom, children express their hostility against the teacher (the outsider) who is the organizing stimulus for the united behavior of the children. The reviewer (GTR) found the article critically important for prospective elementary teachers. The vital concepts are presented in a way which can be understood since observation provides examples of the idea being communicated.

Henry, Jules. Culture against man. New York: Random House, 1963; $7.95 trade; $5.50 text ed. - The author undertakes the most difficult task an ethnologist could set himself, the analysis of his own native culture, and produces a valuable document upon American culture. Part I focuses on themes relevant to institutional organization and the development of character structure; namely, technological driveness--insatiable production and consumption, the meaning of work to the majority (who must) and to the elite (who can choose), the part played by fear in keeping the system going, and fun as "the expression of America's determination to stay alive." Part II relies upon accounts of participant observers for a penetrating discussion of relations between parents and their offspring as well as among age-mates. This part ends with a chapter depicting two families of psychotic children. Part III focuses upon the later years and the fate of Americans whose lives come to an end in impersonal "homes" for the aged. The book is a powerful critique of American culture by a noted social anthropologist who "listens with an ear for trouble." Nevertheless, he believes that man "may eventually come upon a destiny of great beauty." Unfortunately, neither edition contains bibliographical references even to Henry's own work.

Henry, Jules. Vulnerability in education. In Teach. Coll. Rec., 1966 (Nov.), 68, 2, 135-145. - The author discusses the vulnerability--the susceptibility to destruction and defeat of man in our culture. He considers the career of Descartes to show how what attacks people in the scholarly world--fear and punishment for making the very discoveries which are their goal--prevented Descartes from discovering calculus. He concludes that it turns out that incompetence in education is in large part a consequence of fear--fear of one another and fear of communism (as the case cited of Mrs. Franklin) the widespread but covert process of sabotage that plagues the educational system and helps to make our children stupid. "But the incompetence of the educational system is merely one form of bureaucratic incompetence," Henry states. He says that many books are boring and irritating because their authors lack courage.

Hess, Robert D., & Shipman, Virginia C. Early experience and the socialization of cognitive modes in children. Child Develpm., 1965, 36(4), 869-886. - Negro mothers, stratified by social class, were given three simple tasks to teach to their four-year-old children. Analysis of the interaction patterns showed that lower class mothers control their children by status rules with little attention given to the characteristics of the individual situation or problem. Behavior is not mediated by verbal cues or by teaching that relates events to each other and the present to the future. The result is a child who relates to authority rather than to rationale. The child is often compliant but rarely reflective. Behavioral consequences are largely considered in terms of immediate reward or punishment rather than future gain.

Hilgard, Ernest R. Impulsive vs. realistic thinking: An examination of the distinction between primary and secondary processes. Psychol. Bull., 1962 (Nov.), 59, 477-488. - Freudian psychology is in many respects a cognitive psychology as well as a psychology of motivation. Hilgard raises the question as to the ways in which the two kinds of thought processes can be conceptualized (as fusions and mixtures) in the study of thinking.

Holtzman, Wayne H. Methodological issues in P technique. Psychol. Bull., 1962 (May), 59, 248-256. Persons who plan to undertake intensive studies of individuals with repeated measurements over a long period of time encounter the phenomenon of serial dependence. Holtzman's chapter in Harris (1963, pp. 199-211), "The study of change in the single case," should be read in conjunction with this review article.

Horst, Paul. Multivariate models for evaluating change. In Chester W. Harris (Ed.), Problems in measuring change, Madison, Wisconsin: The University of Wisconsin Press, 1963, pp. 104-121.

Hudgins, Bryce B., & Smith, Louis M. Group structure and productivity in problem-solving. J. educ. Psychol., 1966, 57, 5, 287-296. - The authors of a text in educational psychology (see Smith and Hudgins, 1964) report upon a USOE-supported research project. Notice that multiple regression has been used for a portion of the analyses of data.

Jahoda, Marie, & Warren, Neil. The myths of youth. Sociol. Educ., 1965 (Winter), 38, 138-149. - An essay review of three volumes on adolescents (by Rosenmayr, Remmers, the Sherifs, and Erikson) relating them to current literature and some of the present-day myths about youth. The Sherifs (Reference groups, Harper, 1964), for example, "have amply demonstrated the futility of pursuing the question of the existence of a 'youth culture' as a research problem" (an issue raised by Elkin & Westley, The myth of adolescent culture, Amer. sociol. Rev., 1955, 20, 680-684). The Sherifs (1964) also expose the folly of making a sharp break between the "delinquent" and the "non-delinquent."

Jeffrey, Wendell (UCLA) Reviews: A developmental dozen. Contemp. Psychol., 1966 (March), 11, 100-104. - Twelve books are reviewed, including two volumes by Lipsett & Spiker (1964). Jeffrey identifies five periods in the development of Developmental Psychology; namely, "prescientific" (to the time of G. Stanley Hall at Clark U.), "early empirical" based upon tough-minded descriptive and experimental studies focussed upon issues such as heredity vs. environment (Newman, Truman, & Holzinger) as well as "maturation vs. learning" (Gessel vs. Watson), "social behavior" (influence of Freud), "learning theory" approach (Dollard & Miller, 1941 and 1950; with terms like "curiosity," "early experience," and "attention" becoming popular following Hebb, 1948; Harlow, 1949); by 1960, Piaget's work upon cognitive processes and intellectual development being recognized for the first time. The reviewer finds the textbooks, with one exception (Meyer, 1964) relatively disappointing.

Jersild, Arthur R. The psychology of adolescence. (2nd ed.) New York: Macmillan, 1963. - This second edition of a book Jersild first published in 1957 places considerably more emphasis upon physical growth, sexual maturation, and heredity with recurring references to the interaction between genetic and environmental factors in an adolescent's development. A chapter on the self appears early in the text. Later accounts of physical, mental, emotional and social development show how such processes influence and, in turn are influenced by an adolescent's ideas and attitudes regarding himself. Although Piaget is mentioned, his work is not considered to be relevant to adolescent cognitive behavior. No reference is made to either Hunt, Bruner, Cronbach or Berlyne. Consequently the book is not in the stream of current educational psychology and suffers from an inadequate treatment of motivation and what takes place when learning occurs. On the other hand there is an extended treatment of fantasy, the content of adolescent projection, and adolescent emotionality. Thus, the book does have a good deal of value for an instructor who wishes to approach the behavioral sciences in secondary education from the point of view of self theory.

Kiesler, Donald J. Some myths of psychotherapy research and the search for a paradigm. Psychol. Bull., 1966 (Feb.), 65, 110-136. - Myths refuted are: (1) assumptions about patient or therapist uniformity; (2) the phenomenon of spontaneous remission--three exceptions; (3) the belief that present theoretical formulations provide adequate paradigms--Freud's theory of psychopathology; Rogers' earlier and later notions regarding conditions of the therapeutic relationship, "learning theory" via behavior therapy approaches. Each of the three theoretical positions has failed to specify exactly what are the dependent or independent variables. On pp. 129-130, Kiesler sets forth the basic skelton for a paradigm of psychotherapy. Process-outcome studies with pre-post designs wherein myths are taken into account and common sources of confounding are specified.

Klausmeier, Herbert J., & Goodwin, William. Learning and human abilities: Educational psychology. (2nd ed.) New York: Harper, 1966 ($8.95). - The authors employ a concept--emergent human abilities--to bridge "the gap between learning and development as separate entities." In a number of ways KGL is an admirable text, packed with information, as up to date in references and suggestions for further readings as one could expect, highly effective in the use of figures, guiding the reader by a meaningful use of subheadings, setting apart generalizations and principles from discussion, and summarizing what has been packed into each chapter. A number of tables and figures are invaluable aids to a college instructor of educational psychology; e.g., Table 5.2 (Ryan's Characteristics of Teachers), pp. 146-147; Table 6.1 (Amidon and Flanders' "Categories for interaction analysis in the classroom"), p. 168; Fig. 8.1 (Gagne's "Types of human learning"), p. 263; Table 8.3 (Guilford and Hoepfner's "Creative ability involving semantic content"), p. 274; Computing Guide 18.7 (Standard scores), p. 680. Unfortunately, the tremendous scope and detail of this is a barrier to its use. The book does not actually try to involve the reader either as a person (Who am I?) or as a prospective teacher preparing to assume the responsibility of guiding the learning experiences of students in meaningful educational encounters (You mean I am going to be doing, thinking, and feeling this!). Consequently, the text leaves the reader with the feeling that "Learning and human abilities" is something one should know about, not necessarily know that in a very personal sense. The organization of the text is episodic and no network of underlying ideas or generic principles (Bruner's term) emerges to provide the student with a framework of ideas and points of contact with real situations where one has to face learners in educational settings. Part of the difficulty is that the authors are bound by the cocoon of language developed by educational psychologists during what Cronbach (1965) terms "the years of estrangement" before the current renaissance which calls for a different approach buttressed by research made possible through the USOE. Incidentally, Cronbach's 2nd edition of Educational psychology (Harcourt, 1963) has the same defects as KGL. Students in "Behavioral Science Foundations" appraise his revised text quite negatively. KGL fails to make clear to the reader that accounts of child and human development should be based upon studies of changes in human beings over time when time per se is not the variable of major concern but only a frame of reference. Although the authors refer the reader to Hunt (Intelligence and experience, 1961), they fail to emphasize the evidence massed against the long-held assumptions of fixed intelligence and predetermined development. The author's concept of what constitutes learning is quite murky despite the figure and purported explanation of "the sequence in purposeful learning" (pp. 60-70) somewhat akin to but elaborated more than the seven elements or aspects of learning employed by Cronbach (1963, pp. 72-74). The chapter upon motivation (424-461) perpetuates the concept of a hierarchy of needs as if they were "built into" every human being instead of being acquired

through the life cycle--persons of similar age, same sex, same social class, and ethnic backgrounds (marker variables) being more like one another, than like others, because they probably have faced a similar pattern of inevitable encounters experienced by human beings. Use of a secondary reference (Flavell) probably has led K & G to misrepresent Piaget's conceptions of adaptive behavior in children and adolescents as being age-related ontogenetic development of intellectual abilities. The closing part on evaluation and measurement is quite valuable.

Kluckhohn, Florence R., & Strodtbeck, Fred L. Variations in value orientations. Evanston, Ill.: Row, Peterson. - The book explores the basic values of peoples and the effects these values have upon their behavior and thought--an important concept studied in "The Individual in Society" (385.2). The theory as stated in Chapter I is substantially the one Florence Kluckhohn presented as an invited address at the American Sociological Society (New York, Dec. 1949) along with McGuire's "Social statification and mobility patterns." Both have been published, the former in Soc. Forum, 1950 (May), 28, 376-394, and the latter in Amer. sociol. Rev., 1950 (April), 15, 195-204. The assumption is that "there is a limited number of common human problems for which all peoples at all times must find solutions." The patterned principles or value orientations which result from the interplay of three elements of the evaluative process --the cognitive ($S_{cog.}$), the affective (S_d), and directive (rs, Rg) elements--give order and direction to human behavior. In all human groups there are five problems each with a range of solutions: (1) human nature orientation (Evil, Good-and-Evil, Good); (2) Man-nature (Supernatural) oreintation (subjugation, harmony, mastery); (3) Time orientation (past, present, future); (4) Activity orientation (Being, Being-in-Becoming, Doing); (5) Relational (lineal, collateral, individualistic). Studies reported are in a number of southwestern communities. The research is summarized and discussed in Chapter 10 (pp. 340-367) with valuable tables. An appendix has a Spanish-language version of the Value-Orientation Schedule. The approach could be employed in some research studies here.

Kluckhohn, Richard (Ed.) Culture and behavior: Clyde Kluckhohn. - Professor Kluckhohn, a highly respected anthropologist, died in 1960. His son has carried out the father's intention of publishing a book of essays with some manuscripts then in progress. Most interesting to this reviewer were: "The concept of culture" (pp. 19-73), "Personality formation among the Navaho" (pp. 177-181), "A Navaho politician" (pp. 182-209), "The limitations of adaptation and adjustment as concepts for studying human behavior" (pp. 255-264).

Koch, Sigmund. Psychological science versus the science-humanism antinomy. Amer. Psychol., 1961 (Oct.), 16, 629-639. - The Duke U. professor challenges the assumptions which place "action into an 'in order to' context," asserting the inadequacy of the drive reduction hypothesis as well as postulated end states; e.g., "exploratory drive" and its satisfaction, as well as acquired drives--n Ach, self-realization, functional autonomy, and the like. Instead, Koch proposes (p. 633) that "Adience and ambience" (+,-) of organisms are controlled by value determining properties (+,-) which are a product of the ability to differentiate among experiences. Psychology and the social sciences, according to the author, have become camp followers of "that second force called science." They could learn much about value-determining properties of the humanities, "the first force from which all knowledge had germinated." The perception of differential values in "the quiddities of experience" could make (the behavioral sciences) a third force. NOTE: To realize the importance of the humanities as an irreplaceable social cement, of literature as an emotional teaching aid and a repository of past experience, one only has to read Ray Bradbury's novel, Farenheit 451 (the temperature at which paper burns).

Kogan, Nathan, & Wallach, Michael A. Risk-taking: A study in cognition and personality. New York: Holt, Rinehart & Winston, 1964. - Many forms of psychological activity termed "thinking" eventuate in some kind of decision making. The authors began to formulate their inquiry in terms of observations and research indicating that human thinking, particularly of the kind economists call risk taking, often is colored and sometimes dominated by motivational factors. Subjects were college students of both sexes who were paid for their time. The carefully designed and analyzed research demonstrated that moderator variables such as test anxiety and defensiveness (introduced on p. 23) influenced performances upon three separate decision-making tasks--chance strategies, skill strategies, final bets (pp. 208-210)--producing sex-typed and subsample differences. For example, males with a gambling orientation who responded to a stress situation with anxiety and lack of defensive control had depressed verbal aptitude scores. The motivational matrix within which thinking activities occur--e.g., test anxiety and defensiveness--apparently make risk conservatism considerations highly salient to approaching thinking tasks.

Kohlberg, Lawrence. Cognitive stages and preschool education. Human Develpm., 1966, 9, 5-17. - By refining Piaget's concepts and measures of cognitive stages into tests and tasks administered semi-longitudinally to children four to eight, Kohlberg attempts to show that cognitive stages are real, saying that this implies: (1) the responses of children represent a spontaneous manner of thinking which is qualitatively different from adults; (2) that there is a consistency of response from task to task and that responses should demonstrate the same relative structural levels in a variety of tasks; and (3) the concept of stage implies an invariance of sequence in development--a regularity of stepwise progression regardless of cultural teaching or circumstance. Two studies seem to indicate the reality of stages, but this does not imply the unfolding of behavior in the Gesellian sense. To interpret Piaget in the context of Gesell is called an "American misinterpretation." Kohlberg argues that Piaget never intended his stage to be interpreted a la Gesell, but instead used the existence of stages to demonstrate that basic cognitive structures are "not wired in," but are general forms of equilibrium resulting from the interaction between the organism and environment. The author postulates that an approach is needed that will take into account the fact that the preschooler's orientation to reality is a developmental stage which should be integrated into later stages of development.

Kubie, Lawrence S. Pavlov, Freud, and Soviet psychiatry. Behav. Sci., 1959 (Jan.), 4, 29-34. - Russian behavioral scientists still tend to think of the physiological and psychological approaches as irreconcilable. Nevertheless, in 1935, Pavlov (who was producing experimental "neuroses" in dogs) told Ralph W. Gerard in Leningrad, "Do you know I was led to try these experiments by reading some of Freud's work?" He added that deeper understanding of behavior would come from a fusion of concepts of the conditioned reflex and of psychoanalysis--but Pavlov did not express this publically. Kubie demonstrates a number of areas of agreement.

Kuethe, James L. (John Hopkins U.) Social schemas. J. abnorm. soc. Psychol., 1962, 64, 31-38. - To study schema or plans aroused by stimuli with specific social content, the author devised the Felt Figure Technique (three rectangles differing in area; man, woman, child figures; man, woman, dog figures--used in several sets). The model employed by Kuethe to demonstrate the existence of generic social schemata (presumably acquired in developmental experiences) pro-

vides that the same social schemata can operate through quite different response modalities. Subsequent studies of the same author include "Social schemas and the reconstruction of social object displays from memory" (J. abnorm. soc. Psychol., 1962, 65, 71-74) and "Pervasive influence of social schemata" (J. abnorm. soc. Psychol., 1964, 68, 248-254). This technique may be adapted to provide a fruitful means of studying cultural and social symbols as well as abstractions of social objects. This reviewer does not know of any research by Piaget or his co-workers employing techniques such as the FFT or an adaptation.

Lazarus, Richard S. Personality and adjustment. Englewood Cliffs: Prentice-Hall, 1963. - This 118-page paperback succeeds in concisely presenting a number of approaches to understanding the development, the structures and the dynamics of personality. R. W. White's notion of "competence" appears on page 18 in contrast to the "contented cow" concept-type mental health. On pages 74-75, he contrasts attempts to characterize psychological development by universal stages (Piaget, Freud) with the approaches which take account of the effects and interactions of several different kinds of factors; including "social factors and personality development," 76-92. The closing chapters are an assessment and application containing an amazing amount of information. Although the selected readings are not up to date, the ones he has chosen usually have reappeared.

Lesser, Gerald S. (Harvard), Fifer, Gordon, & Clark, Donald H. Mental abilities of children in different social-class and cultural groups. Monogr. Soc. Res. Child Develpm., 1965, 30, No. 4. (Serial No. 102). - The research reported herein was supported by the USOE, Coop. Res. Project No. 1635. The study examined patterns among mental abilities in six- and seven-year-old children from different social class and cultural backgrounds. Class, ethnic, sex, and interacting differences found are summarized on pp. 82-84. Apparently the several subcultures mark some variations in meeting the "inevitable human encounters" (or developmental tasks) such that, over and above individual differences, the development of different patterns of abilities can be detected. The findings "bear directly upon the problem of building valid and precise assessment instruments for children from different cultural groups. The research team modified the Hunter College Aptitude Scale for Gifted Children (Davis, et al, 1960), pp. 32-45; and two Appendices (pp. 94-115) gave "Directions for Administrations" as well as "Scoring Forms."

Lichter, Solomon O., Rapien, Elsie B., Seibert, Frances M., & Sklansky, Morris A. (M.D.) The drop-outs. New York: The Free Press of Glencoe. (A Division of the Macmillan Co., New York-60 Fifth Ave.). 1962.

Lindgren, Henry C. Educational psychology in the classroom. (2nd ed.) New York: Wiley, 1962. - This book is the only place we have found reference for learning theory for teachers developed by Wolcott Beatty (Maryland) & Rodney Clark (Texas) which differentiates between instrumental learning (the acquisition of information, skills and concepts to be used in relating to external reality) and significant learning which involves some changes in the "self structure," i.e., attitudes toward oneself or the self concept (pp. 259-291). Chapter 10, Teacher-centered approaches to the learning situation, pp. 292-321, also is provocative in its contents. The book pays attention to competence (R. W. White) but not curiosity (D. E. Berlyne). It also makes reference to developmental tasks, social class patterns of behavior, relationships with others, and the emotional climate of the classroom. Doubtless a new edition of this effective text will appear in the near future.

Lundquist, Edward A. Item and response characteristics in attitude and personality measurement. Psychol. Bull., 1966 (Sept.), 66, 166-177. - Note the self-descriptive and interest response scales as well as the examples of forms of items. Forms of items apparently are a major cause of confusion surrounding studies of acquiescence, negativism, social desirability, or any other set or response style relevant to items in a personality instrument or attitude scale.

Macdonald, James B., Andersen, Dan W., & May, Frank B. Strategies of curriculum development. Columbus, Ohio: Charles E. Merrill Books, Inc. 1965. - Selected writings of the late Virgil E. Herrick.

Medley, Donald, & Metzel, Harold E. Measuring classroom behavior by systematic observations. In N. L. Gage (Ed.), Handbook of research on teaching. Chicago: Rand McNally, 1963. Pp. 247-328. - The authors have studied relationships between criteria of teacher effectiveness and classroom behavior; e.g., J. educ. Psychol., 1959, 50, 239-246 (Table 6). They review attempts at devising scales to measure "teacher effectiveness" and found that the scales did not bear any relationship to measures of student achievement or gain. The authors assert, "No fallacy is more widely believed than the one which says it is possible to judge a teacher's skill by watching him teach" (p. 257). They do accept, however, the reasonableness of evaluating "effectiveness in process" through identification of crucial behaviors characterizing teachers whose students change compared with those whose pupils manifest less of the desired learned behavior. Flanders' (1960) technique for observing classroom climate (Table 8, Fig. 1), their own attempts to measure multiple dimensions of classroom behavior using a modified Cornell-Lindvall approach (Tables 9 & 10) and to design workable OSCAR forms (Fig. 2), B. O. Smith's approach to studying the logic of teaching (Table 13), and some other approaches are summarized before they go into "planning an observational study." One of the major problems, of course, is to quantify the results of an observational study so that they can be analyzed meaningfully.

Mednick, Sarnoff A. (Michigan, now ETS) The associative basis of the creative process. Psychol. Rev., 1962, 69, 220-232. - The author refers to Albert Einstein's self-searching, "The psychical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be combined.... This combinatory play seems to be the essential feature in productive thought." This and other introspections lead to definition of the creative thinking process as "the forming of associative elements into new combinations which either meet specified requirements or are in some way useful. The more mutually remote the elements of the new combination, the more creative the process or solution." The probability and speed of a creative solution is increased by any condition or state of the organism which brings the requisite associational elements into ideational contiguity; for example, serendipity (usually an accidental contiguity of stimuli which elicit associative elements), similarity (primary stimulus generalization), mediation (of common elements). In accord with the definition, a Remote Associations Test (RAT) was constructed. The article goes on to report some preliminary research with RAT as an operational measure of creativity. The test items consist of sets of three words drawn from mutually remote associative clusters. The task is to find a mutually remote connective link; for instance--rat, blue, cottage (cheese); railroad, girl, class (working); wheel, electric, high (chair or wire); surprise, line, birthday (party); out, dog, cat (house).

Miller, George A., Galanter, Eugene, & Pribram, Karl H. Plans and the structure of behavior. New York: Holt, Rinehart & Winston, Inc., 1960. - A unique approach to the psychology of cognition, utilizing the T.O.T.E. model, is explicated in this valuable book. More emphasis on computer simulation of intelligence gives this book additional meaningfulness to the approach. A chapter on the neuropsychological basis for the T.O.T.E. concept closes the book with a convincing argument. Highly recommended for students of learning and cognition.

Minunchin, Patricia. Sex-role concepts and sex typing in childhood as a function of school and home environments. Child Develpm., 1965 (Dec.), 36, 1033-1048. - Sex-role attitudes and sex-typed reactions of children (N = 52) from "traditional" middle-class schools and homes (stressing socialization toward general standards) were compared with those of fourth-grade 9-year olds (N = 53) from "modern" middle-class schools and homes (stressing individualized development). Data were obtained by direct and projective techniques. Girls from "modern" backgrounds, as hypothesized, departed most from conventional expectations.

Muller, Herman J., Little, C. C., & Snyder, Lawrence H. Genetics, medicine, and man. Ithaca, New York: Cornell University Press, 1949. - Distinguished geneticists proposed replacement of the "nature-nurture" controversy with a concept of three interacting environments--(1) morphogenetic or gene-controlled, (2) the internal or neuroendocrine, and (3) the external or nutritional-social-psychological--operating through the life cycle (pp. 88-107). NOTE: In the zygote, the new nucleus (with male and female chromosomes) reacts with the cytoplasm (largely contributed by the egg), setting out a series of activities which react on itself to initiate differentiation through their interaction.

Mussen, Paul (Ed.) European research in cognitive development: Report of the International Conference on Cognitive Development. Monogr. Soc. Res. Child Develpm., 1965, 30, No. 2 (Serial No. 100). - A set of eight papers presented in 1962 by European participants including Barbel Inhelder (Geneva), "Operational thought and symbolic imagery," and A. V. Zaporozhits (USSR) on "The development of perception in the preschool child." Notice the current and reissued monographs listed on the back cover.

Mussen, Paul H., Conger, John J., & Kagan, Jerome. Child development and personality. (2nd ed.) New York: Harper & Row, 1963. - This book is packed with readable information and enriched with longitudinal research data explained by melding modern learning concepts from theory (emphasizing reinforcement) with psychoanalytic ideas about the dynamics of behavior. The chronological organization of the text and the emphasis upon "critical periods" of development has to be countered by a sophisticated instructor who believes that learning is marked, not by the selective regurgitation of facts in response to appropriate cues, but instead, by their transformation (the process of manipulating knowledge to fit new tasks) as well as by evaluation of the extrapolation (Bruner, 1960, pp. 48-52). Otherwise, most students are not going to relinquish the time-honored assumptions of fixed intelligence and predetermined development and accept a concept of multivariate adaptive abilities distributed among human beings whose development and behavior is a function of three environments--the morphogenetic, the internal neuroendoctine, and the external nutritional interpersonal context of experience. A reader looks in vain for concepts such as "learning how to learn." Kagan's ideas about "the motive to match one's behavior to a standard" (1964) and some lip service to "mastery motivation" (White, 1959) are slanted aside for a "learned needs" explanation (pp. 147-148). Part V on Adolescence is

quite unsatisfactory since neither "age-mate acceptance" nor the "re-formation of the ego" are regarded as factors influencing the behavior of early- and late-maturing boys and girls.

Mussen, Paul H., Conger, John J., & Kagan, Jerome. Readings in child development and personality. New York: Harper, 1965. - This book of readings has a number of valuable selections: e.g., Hunt (Experience and the development of motivation, 150-168); Kagan (The concept of identification, 212-224); Bandura and Huston (Identification as a process of learning, 247-262); Piaget (How children form mathematical concepts, 304-312); Kagan (Information processing in the child, 313-324); Kohn (Social class and parental values, 345-366); Rosen & D'Andrade (Psychosocial origins of achievement motivation, 375-399); Erikson (Identity vs. identity diffusion, 435-441); Conger et al (Antecedents of delinquency, 442-468). Like their textbook, their sections are arranged according to successive stages of development. Nowhere has the reviewer (CMcG) found the very important point that the study of child and human development involves the examination of change over time, where time itself is not the variable of major concern, but, rather time is the backdrop upon which change is depicted. Fortunately, a goodly number of the articles emphasize antecedant-consequent relationships. Since "stage dependent" theories of development have been called into question (See some recent issues of Science), one questions the inclusion of the concept of "critical periods" in the development of social behavior; e.g., the applicability of observations on puppies to children.

McCary, James L. (Houston) (Ed.) The psychology of personality. New York: Grove Press, Inc., 1956. (Paperback: $2.95). A book of readings including: Bellak, Leopold (Psychoanalysis); Cattell, R. B. (Factor analysis); Klein, G. S. (Clinical); Mead, M. (Cross-cultural); Sanford, N. (Authoritarian personality), author of Self and society, a primary reference for Ed. Psy. 385.2; and McClelland, D. C. (Integrative). The words in this book are outstanding, but do not appear to provide coverage for other important approaches to the study of personality such as the works of Carl Rogers, Kurt Lewin, or Gordon Allport to mention only three. This book is seen as a valuable ancillary resource for any serious student of the human personality.

McDill, Edward L., & Coleman, James. Family and peer influences in college plans of high school students. Sociol. Educ., 1965 (Winter), 38, 112-126. - Data are from 612 students in six midwestern high schools. Comparable HTRP data are available for replication. Analysis of the Illinois data indicate that, "by the end of the senior year of high school, status in the social system of the school contributes more to variation in college plans than does parents' education." These findings are said to challenge the results of several studies which show socioeconomic background to be the most important factor. The reviewer (CMcG) has found peer acceptance to be the most important factor (1949, 1950, 1956) but would like to see if the changing zeitgeist has altered matters with Texas students (as it has with the valuation of being "a brilliant student" vs. "an outstanding athlete," Coleman, 1961). A fuller report of the research may be found in the author's earlier article (High school college status, college plans, and interest in academic achievement) Amer. sociol. Rev., 1963 (Dec.), 28, 405-918. The seven tables and footnotes are valuable if one follows up ideas given therein.

McDonald, Frederick J. Educational psychology. (2nd ed.) Belmont, Calif.: Wadsworth, 1965. - This second edition of a book first published in 1959 reflects the author's view that educational psychology is moving toward the use of models which permit a teacher to make hypotheses and then test the affects of various strategies in the production of learning, as well as his

active involvement in an experimental program of teacher education. A good deal of attention is paid to a psychological model of teaching behavior wherein the teacher is a decision maker. A plan is a guide for action, and decision rules are principles to be used in selecting among alternative courses of action. In this feedback model (stemming from Newell, Shaw, and Simon, Psychol. Rev., 1958, 65, 151-166) a decision made by the teacher in formulating teaching plans is a hypothesis about learning and certain assumptions have to be made about the learning organism (symbolic model of the learner), Fig. 3-1. The instructor who elects to use this text is going to have to know the background of present day educational psychology, and supplement the book to clarify it with what he gleans from his personal reading. References are made to Bandura, Bruner, Cronbach, Gagne, but not Berlyne. Chapter 11 on Personality and the self conflict, and Chapter 12 on Patterns of development are well written, reflect a thorough grasp of the literature, questions to be explored and contain appropriate illustrative material. The concepts of "developmental tasks," "critical period," and Piaget's developmental theory are clearly presented (pp. 482-496). Part III on the social conditions of learning focuses upon teacher student interactions (Chapter 13) and the school as a social system (Chapter 14). Part IV on methods of evalution contains a good deal of valuable material. Excellent test for the teacher, however, students may not like it anymore than Cronbach.

McKeachie, Wilbert J. Procedures and techniques of teaching: A survey of experimental studies. In N. Sanford (Ed.), The American college. New York: Wiley, 1962. Pp. 312-364. - The "criterion problem" (p. 319) refers to the degree of precision in defining just what a student is expected to learn from any particular teaching experience. A control group should be given the opportunity to "learn" the same content, and that tests be based upon this content. McKeachie does a chapter (Research on teaching at the college and university level) in N. L. Gage (Ed.), Handbook of research on teaching. Chicago: Rand McNally, 1963, Pp. 1118-1172. Table 1 in this excellent chapter (p. 1134) depicts dimensions upon which student-centered and instructor-centered methods may differ. The comparison between lecture and discussion methods, with due attention to the criterion problem (pp. 1132-1133) is a thoughtful statement.

McKeachie, Wilbert J., & Doyle, Charlotte L. Psychology. New York: Addison-Wesley, 1966. - This introduction to psychooogy is desirable background for a student beginning teacher education in their junior year. Cultural and biological backgrounds of behavior both are considered (Chapter 1 & 2) as well as the person in society (Chapter 16). Preliminary explanation of learning, perception motivation and cognition are clear and often well-illustrated (Chapter 5-10). Chapter 11 presents a highly effective account of frustration and the mechanisms of defense. The reader not only has an opportunity to grasp the structural and central ideas of psychology as a foundation for later experiences in the field, but also encounters a valuable "Short guide to statistics" (pp. 598-615), and a bibliography (pp. 637-671) with indications of the chapter to which the reference is applicable.

McLuhan, Marshall. Understanding media: The extensions of man. (2nd ed.) New York: Signet Book Q-3039, 1966. Paper 95¢. (1st ed., McGraw-Hill, 1964). - A provocative book which documents the thesis "that electronic media are subtly and constantly altering our perceptual senses" and that "slang offers an immediate index to changing perception" since it is based not upon theories but on immediate experience. He believes men seldom are aware of the ground rules of their environmental systems or culture ("not passive wrappings but active processes"). He asserts "Man now lives in a global-sized village, and is returning to the values and per-

ceptions of a preliterate culture" and that "TV has provided a new environment of low visual orientation and high involvement which makes accomodation to our older educational establishment quite difficult." The Toronto Professor holds that "TV is only one component of the electric environment of instant circuitry that has succeeded the old world of the wheel and nuts and bolts."

Neuman, Fred, & Oliver, Donald W. (Harvard) Education and community. Harv. educ. Rev., 1957 (Winter), 37, 61-106. - After presenting two interpretations of modern American society as contrasting ways of construing social issues and educational needs--"The Missing Community" (fragmentation, change, instrumental values, depersonalization of experience, powerlessness) versus "The Great Society" ("concepts of individuality and community take on entirely new meaning")--the authors re-examine the premises of contemporary American education. They raise questions about the premises "that education is (a) formal schooling, operating as (b) a public monopoly, (c) modeled after the organizational structure and utilitarian values of corporate business." They conclude that present-day "schooling prevents experimental activity... prohibits total involvement in any single interest, ... refuses to delegate to students responsibility for seeking their own 'education' ... (since) it has virtual monopoly on youth's time and energy." A proposal for education in community considers learning being pursued in three quite different contexts: (1) "school" with reorganized basic content to make systematic instruction lead toward more powerful insights and understandings; (2) "Laboratory-studio-work" for the completion of a significant task--"learning in the midst of action" as a by-product of genuine participation; (3) "Community Seminar" for the reflective exploration of community issues and ultimate meanings in human experience. To the authors, education has three facets; namely, semantic instruction, action, and reflection.

Osgood, Charles L. Studies on the generality of affective meaning systems. Amer. Psychol., 1962 (Jan.), 17, 10-28. - This is a surprisingly effective summary of Osgood's model for a mediation conception of meaning and the measurement technique known as "the semantic differential." American subjects tend to respond to the adjective pairs in such a manner that three factors emerge--evaluative, potency, activity--reproduced in Table 1. Progress in cross-national testing of the Osgood schema is reported in the article.

Overall, John E. A configural analysis of psychiatric diagnostic stereotypes. Behav. Sci., 1963, 8, 211-219.

Overall, John E. Note on multivariate methods for profile analysis. Psychol. Bull., 1964 (Mar.), 61, 195-198. - This note is included to represent some kinds of work accomplished by a UT graduate with an NIMH Research Career Development Award. Overall examines a distance function approach. He identifies the special case where D^2 is the sum of squared differences between two separate profile elements and $\underline{d}$ is the vector of $\underline{p}$ difference scores.

Overall, John E. Note on the scientific status of factors. Psychol. Bull., 1964 (April), 61, 270-276. - Overall here questions the assumed relationship between factor analysis results and underlying primary dimensions of objects. There is no necessary correspondence between the number of factors obtained and the number of primary dimensions of objects. (The reviewer (CMcG) has a hunch that this "note" was initially undertaken as one consequence of a three-way discussion involving Lee Cronbach following CMcG's paper given at the ETS Testing Conference in

New York on Oct. 29, 1960). Nevertheless, Dr. Overall concludes, "Factor analysis is a procedure for obtaining from a large set of correlated measurements a relatively small set of uncorrelated psychologically meaningful linear components which account for most of the variance in a larger set. The three usual objectives are parsimony, orthogonality, and meaningfulness." His illustrative analysis shows that meaningful concepts can be associated with the simple structure factors he obtains.

Overall, John E., & Gorham, Donald R. A pattern probability model for the classification of psychiatric patients. Behav. Sci., 1963, 8, 108-166. - This is an example of the application of Bayes' theorem using variables in a probability framework; i.e., a strategy for classification. A computer program was written to assign real patients, with a minimum of errors, to the same diagnostic classes to which they earlier had been assigned by nine psychiatrists and ten clinical psychologists. The same approach was employed in a dissertation completed by Randy S. Sininger (1965) differentiating among college students at U.T., "An analytical study of certain demographic factors for predicting student social adaptability to an academic community."

Overall, John E., & Williams C. M. Conditional probability program for diagnosis of thyroid function. J. Amer. Med. Assoc., 1963, 183, 307-313.

Passow, A. Harry (Ed.) Nurturing individual potential. Washington: A. S. C. D., 1964. - Valuable sections by MacKinnon (Conditions for effective personality change, 12-27); Kubie (Research in protecting preconscious functions in education, 28-42); Gallagher (Research on enhancing productive thinking, 43-56); Flanders (Teacher and classroom influences, 57-65); Cloward, R. A. and Jones, J. A. (Social class: educational attitudes and participation, 66-91).

Peabody, Dean. Authoritarian scales and response bias. Psychol. Bull., 1966 (Jan.), 65, 11-23. - Compared with self-report measures like the MMPI, authoritarianism scales are susceptible to agreement response bias because of imbalance of item keying, ambiguity of items to subjects, and scoring all items in one direction.

Pelto, Pertti J. The study of anthropology. Columbus: Merrill, 1965. - This paperback presents teachers with an effective introduction to anthropology as "the study of man," as well as the several branches of the discipline. Pelto provides a brief history of anthropology--L. H. Morgan (Table 1. Stages of evolution); E. B. Tylor (Primitive culture, 1871); F. Boas (The man who "overthrew" cultural evolutionist theories and emphasized the gathering of ethnographic data in field work); Emile Durkheim's influence upon A. R. Radcliffe-Brown (And in turn, upon W. L. Warner)--development of functionalist theories of anthropology which maintains that parts of the society and the culture which supports it function to maintain the life of the society. For a modern view, consult Walter Goldsmidt Comparative functionalism (California, 1966). A chapter on methods of anthropological research is followed by another upon significant research in the field. Promising developments in anthropological theory (pp. 59ff) include: Julian Steward's theory of "multilinear evolution" (similar processes of cultural development under widely separated circumstances); Guy Swanson's hypothesis that witchcraft beliefs are related to the presence or absence of legitimate social controls. Pelto presents thirteen postulates of anthropology (pp. 68-76) and makes an inventory of problems for research after discussing the concept of culture as learned patterns of social behavior instead of biologically inherited characteristics of certain "races."

Pettigrew, Thomas F. (Harvard) Continuing barriers to desegregated education in the South. Sociol. Educ., 1965 (Winter), 38, 99-111. - With one table, extensive documentation, clever typology, and an organized marshalling of the reference data (giving examples of what he means), the author demonstrates three sets of factors: (1) social structural barriers - Negrophobia deepest in rural, traditional, impoverished "Black Belt" areas; (2) white resistance - apart from violence and economic intimidation, there still is restrictive state legislation and an increasing amount of urban de facto segregation through residential separation (present in the North); (3) Negro insistence or failure to insist - an avoidance learning cycle of fear and withdrawal, the entrenched role of "Negro," and vested interests in maintaining Negro communities created by segregation. Despite these barriers, Pettigrew believes that "southern" education is about to enter a new era characterized by more rapid desegregation and less conflict. The critically important pressures apparently have been the Civil Rights Act of 1964, particularly the carrot (federal funds) and the stick (threat of ending payments) built into Title VI of the Act. Ultimate progress of the new era apparently depends upon the constraint of "racially-separated residential patterns."

Piaget, Jean. La psychologies de l'intellegence. Paris: Colin, 1947, The psychology of intelligence. Trans. M. Piercy and D. E. Berlyne. London: Kegan Paul, 1950; New York: Harcourt, Brace, 1950; International Library of Psychology paperback--Totowa, N. J.: Littlefield and Adams, 1966. $1.75. - The translation probably is the most effective representation of Piaget's ideas available in the English language. Note the assumption of the dual nature of intelligence as something both biological (operations, 32ff) and logical (schematisation supplying rules "groupings," 40ff). Discussion of relations between affect and cognition clarifying the manner in which Piaget differs with Lewin (3-7). Intelligence ("a system of living and acting operations") is regarded as adaptation, i.e., "an equilibrium between the action of the organism on the environment and vice versa" (7-17). Note the concepts of "anticipatory schema" (38-39), "equilibrium and development" (48-50), "assimilatory schemata" (125), "response-schemata," and the idea that "intuition is an imaginal thought" (137-138). Piaget distinguishes five stages toward the completion of reflective intelligence (123ff). (1) sensori-motor intelligence; (2) acquisition of language which permits the development of symbolic and preconceptual thought; (3) intuitive thought; (4) concrete operations; (5) formal operations (Chapter 5). Chapter 6, on "social factors in intellectual development," discusses the socialization of intelligence and the nature of an interaction of thought between individuals ("the system of operations executed in common").

Razran, Gregory. Soviet psychology and psychophysiology. Behav. Sci., 1959 (Jan.), 4, 35-48; reprinted from Science, 1958, 128, 1187-1194. - Razran visited the USSR in 1934 and had an interview with Pavlov (who was 85 at the time). In this article, he asserts that current Soviet psychology is rooted in two disciplines: (a) Pavlovian physiology or psychophysiology, dealing with mechanisms and controls of "higher nervous activities," and (b) psychology proper, dealing with mechanisms and controls of mental (conscious) acts which, also, are said to be basically related to Pavlov's doctrines and methods. A summary of recent developments in Soviet psychology by Josef Brozik (LeHigh U.) may be found in Ann. Rev. Psychol., 1964, 15, 493-594. Sections of this review are devoted to human development, psycholinguistics, personality, psychotherapy, and education. Professor Brozik reports upon Razran's account of his 1961 visit to the Soviet laboratories and institutes. Razran's chapter is to appear in G. Murphy & L. B. Murphy (Eds.), The world of mind (Knopf, in press).

Riessman, Frank, Cohen, Jerome, & Pearl, Arthur (Eds.) Mental health of the poor: New treatment approaches for low income people. New York: Free Press, 1964. - Unfortunately, this book has no index to guide the reader other than the contents which divide the selected articles, reviews, and excerpts into four parts. The selections range from a short excerpt (pp. 37-38) from the late Thomas Langner's Life stress and mental health (Free Press, 1963), wherein his former colleagues report upon the Mid-town Manhattan Studies, to the reprint of a chapter by Martin Deutsch (The disadvantaged child and the learning process, pp. 172-187) from a book edited by A. Harry Passow, Education in depressed areas (Columbia,1963). This reviewer was intrigued by John P. Spiegel's article (Some cultural aspects of transference and countertransference, pp. 303-320) from Jules Masserman (Ed.), Individual and familial dynamics (Grune & Stratton, 1959). Spiegel employs Florence Kluckholn's categories of value orientations (Soc. Forces, 1950, 28, 276-293) as a basis for analysis of a range of variability in the value orientations of MC, Italian, American and Irish-American families.

Ripple, Richard E. Readings in learning and human abilities. New York: Harper, 1964. - This book of readings was prepared to accompany a number of texts in educational psychology as Klausmeier and Goodwin, Cronbach (1963), Lindgren (1962). A cross reference chart is followed by "An introduction to statistical analysis and terminology," prepared by Jason Millman. The first selection is by Carl R. Rogers (The place of the new world of the behavioral sciences) and is followed by others grouped into eight parts, concluding with "Measurement and evaluation." Among the selections are ones by J. P. Guilford (Three faces of intellect, 46-64), J. S. Coleman (Adolescent subculture and academic achievement, 135-151), J. S. Bruner (The act of discovery, 236-248), D. W. MacKinnon (Nature and nurture of creative talent, 305-323), Jules Henry (Attitude organization in elementary school children, 330-347), H. D. Drummond (Team teaching, 490-496), H. V. Perkins (Nongraded programs, 505-510), and R. L. Ebel (Measurement and the teacher, 528-534).

Rose, Charlotte B. Sociology, the study of man in society. Columbus: Merrill, 1965. - This paperback provides a valuable introduction to sociology as the study of man in society, particularly in terms of group life. Reference is made to some of the "fathers" of the discipline --Max Weber, William G. Sumner, Emile Durkheim (The division of labor in society). A chapter on methods employed by sociologists is followed by one on significant research--past and present--with regard to the Chicago studies of the city, predicting success or failure in marriage, the community studies (Warner, Dahl, and the Hunter-Mills thesis), as well as deviant behavior too. Topics such as "primary and secondary groups, socialization, communication and culture" are not neglected.

Rosenblith, Judy F., & Allinsmith, Wesley (Eds.) The causes of behavior II: Readings in child development and educational psychology. (2nd ed.) Boston: Allyn & Bacon, 1966. - This second edition is suited particularly to courses in teacher education such as those at UT which combine the content of educational psychology with the study of child and human development, "Behavioral Science Foundations of Education," with sections tailored for prospective elementary and secondary school teachers. The General Introduction has an orientation, "How to read statistics." The editors provide valuable introductions to each of the eleven groups of readings. Prospective teachers (and psychologists) should become familiar with the ideas of Robert and Pauline Sears (socialization, motivation of the learner), R. W. White (competence motivation), Jerome Bruner (image and symbol, Growth of mind, Learning and thinking), J. McV.

Hunt (Personality theory), J. W. Whiting (Theories of learning and behavior), P. W. Vernon (Ability factors), Wallach & Kogan (The creativity-intelligence distinction), Carl Rogers (The valuing process), G. W. Allport (Psychological models for guidance), T. F. Pettigrew (Anti-Negro prejudice), Miriam Goldberg (Teachers for disadvantaged children), Nevitt Sanford (Ego process in learning).

Rossi, Peter H. Social factors in academic achievement. In A. H. Halsey, Jean Floud, & C. A. Anderson (Eds.), Education, economy, and society. New York: Free Press, 1961. Pp. 269-273. - Rossi's review of the literature leads him to claim that "ability," "intelligence," or whatever term one uses to represent the personal qualifications a student brings with him to school, accounts for 40 to 60 per cent of the variation in student performance. If intellectual qualities are held constant, relationships between achievement and other variables are reduced (p. 268). The other big predictor is past achievement. In reading studies of the relation between IQ and academic performance, one should remember that (1) intelligence is a multi-dimensional concept, as shown in the HTRP and Project Talent studies as well as in Guilford's "structure of the intellect" model, and (2) intelligence is not a purely hereditary phenomenon, but apparently is influenced a great deal by the individual's environment and experiences. For example, with reference to Harlem schools and home influences in New York, Paul Goodman, Growing up absurd (Random House, 1960) writes "the combined efforts of home influencing and school education, a powerful combination, succeeded in making the children significantly stupider year by year" (p. 79).

Sarason, Seymour B. (Yale), Davidson, Kenneth S. (Wayne State), & Blatt, Burton (Boston) The preparation of teachers: An unstudied problem in education. New York: Wiley, 1962. Paper, $1.95. - The central theses of the book is that the contents and procedures of teacher education frequently have no demonstrable relevance to the actual teaching task. Although the title of the little volume implies criticism, the book does reflect a genuinely warm regard for and an informed appreciation of the teacher educator and his or her role. The authors assert (1) that all too often children seem to be viewed as computers in whom information is to be stored so that it can be recalled upon certain signals, and (2) that teachers tend to handle children in the learning process much in the same way that they were handled in the course of their professional training.

Sarason, Seymour B., & Associates. Psychology in community settings: Clinical, educational, vocational aspects. New York: Wiley, 1966. - In the spring of 1965, the program for preparation of school psychologists had the senior author visit UT and talk about the Psycho-Educational Clinic at Yale U. During the past year, Texas has committed itself to programs which affiliate community mental health with public health and education, to community action programs, and to coping with various aspects of mental retardation. This book provides a model for learning through imitative identification for many persons concerned about intervention into child and human development--particularly teachers, counselors, school psychologists, and community mental health workers. Chapter 19, "The consultant," pp. 495-537, analyzes the role with twelve examples.

Sawyer, Jack, & Levine, Robert A. (Chicago) Cultural dimensions: A factor analysis of the world ethnographic sample. Amer. Anthrop., 1966 (June), 68, 708-731. - This quantitative exploration of data accumulated in the Human Relations Area Files is a valuable example of component analysis (where 1.0 is the diagonal entry) as a preliminary data-reduction technique in order to

identify a minimal set of relatively independent variables for further analysis. Table 1 shows the quantitative scaling of 30 cultural characteristics and Table 2 their intercorrelations over 565 societies. Table 3 shows the obtained loadings of the 30 cultural variables on each of the ten factors with the communality (h^2). The ten components or dimensions of cultures account 74 per cent taken for each of the six regions employed in Murdock's (1957) classification of HRAF for a World Ethnographic Sample. Not only does the component analysis (Harris, 1963, p. 139; Maxwell, Psychol. Bull., 1959, 56, 228-235) serve as a data-reduction technique to identify a minimal set of relatively independent variables, but also the approach can facilitate further analysis (e.g., in Child, Bacon, & Barry, 1965).

Scheffler, Israel. (Harvard) Conditions of knowledge: An introduction to epistemology and education. Chicago: Scott, Foresman, 1965. Paperback. - What is knowledge? How does it arise? How ought the search for knowledge to be conducted? (the process of inquiry). How is knowledge best taught? (transmission of knowledge). This is a volume in a new Keystones of Education Series which should be invaluable for those who desire an orientation to Education and those of us who want to be updated. For example, how are the cognitive terms knowing and believing related to the educational terms learning and teaching? The author believes that "In teaching, the teacher is revealing his reasons for the beliefs he wants to transmit and is thus, in effect, submitting his own judgment to the critical scrutiny and evaluation of the student; he is fully engaged in the dialogue by which he hopes to teach, and is thus risking his own beliefs, in lesser or greater degree as he teaches.

Scheffler, Israel. Philosophy and education: Modern readings. (2nd ed.) Boston: Allyn & Bacon, 1966. - The readings and comments focus attention upon underlying conceptual problems which confront those who would understand what education is, how it is best talked about, and what sorts of reasoning are appropriate in educational contexts. Educators in 332 should read chapter 4, "Intellect and Skill," pp. 137-202, which has selections from the work of Gilbert Ryle.

Scholte, Robert. Epistemic Paradigms: Some problems in cross-cultural research on social anthropological history and theory. Amer. Anthrop., 1966 (Oct.), 68, 5, 1192-1201. The author believes that "paradigimatic rivals cannot hope to debate social anthropological issues productively and intelligently unless they first comprehend and account for the broader intellectual-historical context in which their own and rivals' paradigms are grounded and through which they develop.'

Sears, Pauline, & Sherman, Vivian. In pursuit of self esteem. Belmont, California: Wadsworth, 1964. - "The purpose of this book is to increase understanding of the development of children in their middle-childhood years, especially in their school life and work." Eight depth case studies are presented. Children are normal and from upper middle-class backgrounds. The case studies are designed to help the reader develop his own skills of synthesis and critical thinking about personality development and educational issues. Part one of the book discusses research methodology and methods of personality assessment in the context of the research project. Part two presents the eight case studies. These were selected to present a wide range of childhood behavior. The authors believe the book can help the student bridge the gap between statistical scores and human behavior; to move with greater confidence back and forth from data to inference in understanding human development.

Sederberg, Charles H. A comparison of teaching methods for average and below-average ninth grade pupils. J. educ. Res., 1966 (Jul.-Aug.), 10, 435-440. - The author carried out his research in a suburban school district with a predominant middle-class population. The study showed that ninth-grade pupils of "lower ability" learned more mathematics when assigned to courses in general mathematics than comparable pupils assigned to a modified course in beginning algebra. The analyses of data are summarized in three tables. Note that control groups who had only a course in reading and study skills also acquired mathematical skills and concepts as measured by the Davis Competence, SRA Arithmetic, Coop Algebra, and Mathematics Inventory instruments.

Sherif, Muzafer, & Cantril, Hadley. The psychology of ego-involvements. New York: Wiley, 1966. Pp. 525. $2.45. Reprint (Original, 1947). - Somehow, behavioral scientists have by-passed this seminal examination of the formation of the "Ego" and of ego-involvements as a set for learning. Chapters 8 and 9, "Re-formation of the ego in adolescence," pp. 199-279, for example, provide some of the first published material upon "adolescent culture" as an age-mate reference group (pp. 252-261) and draw together material upon "Adolescence in different cultures and times" (pp. 201-220). Ideas for further inquiry may be a consequence of reading this early study of "social attitudes and identifications" which closes with a chapter upon "The ego in psychoanalysis" and a rejection of Freudian formulations.

Silberman, Charles E. Technology is knocking at the schoolhouse door. Fortune, 1966 (Aug.), 74, 120-125 and 198-205. - Those who have believed and asserted that "the schools in our community serve all the children of all the people" should be the first to read this article. The author fulfills the prediction (Beh. Sci. Bull., No. 11, July, 1966) that writers will be referring to a new era, or to an educational renaissance, largely as a consequence of the abandonment of beliefs in predetermined development and fixed intelligence. He expressed the zeitgeist, "in the contemporary world, the school's failure to educate a large proportion of its students has become morally and socially intolerable." "At the same time there has been a growing realization that the schools are failing white middle-class children, too--that all children, white as well as black, 'advantaged' as well as 'disadvantaged,' can and indeed must learn more than they are now being taught... that (the schools) were teaching the wrong things and leaving out the right things. Where the schools fell down most abysmally was in their inability to teach youngsters how to learn, to teach them independence of thought, and to train them in the uses of intuition and imagination." Sections of this provocative and thoughtful article are devoted to the new concept of intelligence, reforming the teacher, the individualization of instruction, "discovery methods" and computer-assisted instruction, and what knowledge is worth most.

Skeels, Harold M. Adult status of children with contrasting early life experiences. Monogr. Soc. Res. Child Develpm., 1966, 31, No. 3 (Serial No. 105). - The subjects in the two groups of the original study (13 "experimental," 12 "contrast") took part in studies reported during the "nature-nurture" controversy some three decades ago. Both groups experienced early intervention influencing the amount of developmental stimulation and intensity of relationship with a mother-surrogate--adoptive home vs. orphanage. In education, the contrast group completed a median of less than the third grade; the experimental Ss completed a median of the twelfth grade. The children in adoptive homes were originally evaluated as being less intelligent than those in the contrast sample. Although 11 children in the experimental group showed marked mental retardation at the beginning of the research at Iowa, the developmental trend

apparently was reversed through planned intervention during the experimental period. The data support the conclusion of an article by Hunt (Merrill-Palmer Quart., 1964, 10, 209-248; reprinted in Hechinger, 1966).

Smedslund, Jan (U. Bergen, Norway) Concrete reasoning: A study of intellectual development. Monogr. Soc. Res. Child Develpm., 1964, 29, No. 2 (Serial No. 93). - 1963 SRCD Award; data collected while a Research Associate and Visiting Lecturer at Behavior Research Laboratory U. of Colorado. S's were 160 children from four to eleven years of age, probably U.M. The study was undertaken to determine relations within a set of items presumably measuring concrete intelligence (reasoning). Further techniques have to be developed to explore the nature of intellectual structure and inference patterns being used by young children, 14 references, largely to Smedslund's own work and that of Piaget.

Smith, Louis M., & Hudgins, Bryce B. Educational psychology: An application of social and behavioral theory. New York: Knopf, 1964. This book sets out to be the kind of text envisioned by the facilty in educational psychology for "Behavioral Science Foundations of Education." The presentation is in the form of 20 chapters divided into five units; namely, (1) Science of behavior of the classroom (including an exemplary chapter on measurement); (2) Personality; (3) The classroom as a social system (4) Learning (lacking in much of what appears in our BSR Memos from the 1964 NSSE Yearbook, Theories of learning and instruction, edited by E.R. Hilgard); (5) Transition--Toward a theory of instruction (which should be rewritten in the light of recent publications in the bibliography for 332). The text has effective accounts of the classroom as a social system with references to the social environment, teacher behavior, social class influences, and classroom discipline. References to Piaget (except for the use of his "schemata" as an element in personality), Bruner, Berlyne (epistimic curiosity), and R.W. White (competence), however, are lacking.

Smith, M. Brewster. Mental health reconsidered: A special case of the problem of values in psychology. Amer. Psychol., 1961 (June), 16, 299-306. - During a MHTE conference at Wisconsin in 1961 the California professor suggested that "mental health" should not be regarded as a theoretical concept but, instead, as a rubric or chapter heading under which fall a variety of evaluative concerns. Smith believes that "there no longer is a traditional state of concensus to fall back on." He goes on, "we still have values, in the sense of personal standards of desirability and obligation... committing choices that people make (often unwittingly) in the interplay of cultural tradition and individual experience. Notice Table 2 which illustrates narrow and broad conceptions of mental health. He concludes, "If we understand 'mental health' not as an unsatisfactory and vague theoretical concept but as a reasonably adequate rubric or label for an evaluative psychological perspective on personality... we can get about our business without wasting our efforts on the search for concensus on a unique set of mental health criteria (e.g., see Table I on p. 300).

Soltis, Jonas. (TC, Columbia) Philosophy of education: A fourth dimension. Teach. Coll. Rec., 1966 (April), 67, 524-531. Sometimes colleagues do not understand one another's approach to their several disciplines. Moreover, students often are left "in the dark." Soltis presents

his own blueprint of the academic structure termed "philosophy of education." He specifies three dimensions and, after 'a pause for perspective' (pp. 527-8), goes on to a fourth: (1) the synthetic-synoptic, concerned with a systematic and comprehensive view of universe which may either be original (as in the case of John Dewey or Plato) or derivational from some other worldview (and kept consistent with the basic tenets that approach); (2) prescriptive-programmatic, concerned with values (judgments of worth, accounts of the Good created) --which are either judgmental or descriptive; (3) analytic-explicative, seeking clarity and precision of meaning by probing through the surface of philosophizing about education in an attempt to locate underlying assumptions--a dimension having critical and constructive aspects; and (4) "The field of education," looking at it as a structure of knowledge or as a discipline --i.e., examining components of the field and asking structural, procedural, or methological questions.

Stevenson, Harold W. (Ed.) Concept of development. Monogr. Soc. Res. Child Develpm., 1966, 31, 5 (Serial No. 107). Valuable papers with discussion from a conference at U. Minnesota; e.g., Harriet Rheingold (Development of social behavior in the human infant, 1-17); Bernard Rosenblatt (Some contributions of the psychoanalytic concept of development to personality research, 18-350; R.R. Sears (Personality and social psychology, 36-39); Wm. Kessen (Questions for a theory of cognitive development, 55-70); D.E. Berlyne (The delimitation of cognitive development, 71-81). Notice the manner in which four principles are employed to organize facts and theories about child and human development: (1) Responsivity to stimulation (2) of the active organism (3) whose behavior is modifiable and who, in turn (4) modifies the environment, particularly the social environment. There is agreement upon the notion that development involves a sequential set of changes in the system and that social behavior is evoked, maintained and modified by another organism, usually by a member of one's own species. The contents not mentioned above may be of interest to many readers. The articles are by C.C. Spiker (The concept of development: Relevant and irrelevant issues, 10-54) and Wm. Kessen (Questions for a theory of cognitive development, 55-70).

Stolnaker, John M. Recognizing and encouraging talent. Amer. Psychol., 1961 (Aug.), 16, 513-522. (Walter V. Bingham Memorial Lecture, 1961). - The lecture series is designed "to call attention to the importance of the discovery and development of talented persons." Stolnaker describes The National Merit Scholarship Program which was created in the mid-1950's with Ford Foundation funds as a means of arousing the public's awareness of and respect for individual talent. Notice that the staff involved in the national talent search dislikes the overemphasis which the public gives to the I.Q. There is a danger of overlooking the complex nature of intelligence and underestimating the role of effort necessary to become an intelligent person.

Stott, Leland H., & Ball, Rachell S. Infant and preschool mental tests: Review and evaluation. Monogr. Soc. Res. Child Develpm., 1965, 30, No. 3 (Serial No. 101). - The authors state their task, consider the changing concept of intelligence, and review the development of intellectual tests for young children before describing their survey of the current use of infant and preschool mental tests. Responses to their survey instrument were obtained from persons who actually employed the tests and had an opportunity to observe the Ss actual behavior subsequently or to review the kinds of behavior predicted by the tests. Within the limits set by

their questionnaire study and their consideration of the available literature, the authors concluded: (1) A real need exists for more adequate means of appraising the intellectual functioning of young children; (2) Recent research (by Hunt in 1961 and the publications of Berlyne subsequent to his year with Piaget) has provided a clearer understanding of the multivariate nature of intelligence and the developmental changes involved; (3) There is a great deal of inconsistency among and within currently employed techniques in terms of factor content and meaning; (4) New approaches to the assessment of intellectual functioning have to be developed.

Suppes, Patrick. The uses of computers in education. Scient. Amer., 1966 (Sept.), 215, 207-220. - A readable presentation of the manner in which the information-processing capacities of computers and components (keyboard, earphones, screens, cathode ray tubes, light) which allow interaction of student and the computer (see picture on p. 218) in educational encounters at several levels: (1) "drill and practice" systems, with cumulative records kept for each pupil; (2) "tutorial systems" which individualize instruction for bright as well as educationally deprived children; (3) "dialogue systems" which are being worked out and require the solving of two central problems (explained and illustrated). Questions and issues raised by the introduction of computers for such administrative functions as record-keeping and the collection of systematic data on how children succeed in the process of learning a given subject. Companion articles in this issue are devoted to information processing, computer logic and memory, inputs and outputs (including graphical displays, system analysis and programming, time-sharing, transmission of computer data, uses in science and technology as well as organization) information storage and retrieval (the distant goal of an automatic general library), and the steps indicating that a machine can be made to exhibit artificial intelligence.

Teevan, Richard C., & Birney, Robert C. (Eds.) Theories of motivation in learning: Selected readings. Princeton, N.J.: Van Nostrand, 1964 (a). Paperback $1.75. - The selections provide a historical perspective upon the study of motivation with selections from Clark Hall, 1943 (Primary motivation and reaction potential, S_d and $_sH_r$); Miller & Dollard, 1941 (Four fundamentals of learning--drive, cue, response, reward or reinforcement); Tolman, 1952 (A cognition motivation model--deprivation, interconnected needs, beliefs and expectations, "confirming" experiences); R.S. Woodsworth, 1958 (Behavior-primacy theories--behavioral capacities and a tendency to deal with environment as the primary drive in behavior). Neal Miller, 1959 (Comments on selected controversial issues). This paperback provides a valuable background for identifying the original ideas which prompted and for evaluating the "new look" in motivation--R.W. White, 1959 (Motivation reconsidered: The concept of competence); Hunt, 1960 (Experience and the development of motivation: Some reinterpretations--the incongruity-dissonance principle); McClelland, 1965 (Toward a theory of motive acquisition--"affectively toned associative networks"); Seward, 1963 (The functional autonomy of motives). Note that Bruner's "will to learn" (1966, pp. 113-128) goes back to Woodward (1947) and involves Berlyne's (1965) "epistemic curiosity" (p. 114 in Bruner's Toward a theory of instruction). Also note

that McClelland's theory that clusters of expectancies develop around affectual experiences was earlier stated by McGuire, 1960 (Foundations of emotional development)--unfortunately in a medical journal.

Teevan, Richard C., & Birney, Robert C. (Eds.) Theories of motivation in personality and social psychology: Selected readings. Princeton, N.J.: Van Nostrand, 1964 (b). Paperback $1.75. - This second volume, with selected materials on motivation, complements the preceding one and goes back to some early roots; e.g., Freud (Instincts and their vicissitudes--self-preservative or ego- and sexual instincts); McDougall, 1930 (The hormic psychology--a purposive psychology); G.W. Allport, 1937 (The functional autonomy of motives); H.A. Murray, 1937 (Facts supporting the concept of need or drive); McClelland, Atkinson, et al., 1953 (Toward a theory of motivation--affective arrousal, n Ach); Maslow, 1955 (Deficiency motivation and growth motivation--self actualization theory instead of deficiency-need-centered explanations); Leon Festinger, 1954 (Motivations leading to social behavior--a social comparison process); J.B. Potter, 1955 (Role of the psychological situation--expectancies and behavior-reinforcement sequences). Compare with annotations on the companion paperback, Teevan & Birney, 1964 (a). Also notice that Murray published a more recent view (Toward a classification of interaction) in Parsons & Shils' Toward a general theory of action (Harvard, 1952). Seward (1963) analyzed Allport's proposal (The structure of functional autonomy).

Torrance, Ellis P. Gifted children in the classroom. New York: Macmillan, 1965. - Torrance portrays some emerging concepts of giftedness which have been a consequence of destroying the myth of "fixed intelligence and predetermined development" (e.g., Hunt, 1961). In Ch. 2, the composite ideal of U.S. teachers (15-17) leads to a consideration of what a "complex concept of giftedness" means when a school decides to identify "gifted children." From this point onward, however, Torrance writes as if there were gifted children who can be motivated to learn. The present reviewer (CMcG) feels that a person concerned about fostering productive thinking or creativity among children and adolescents in schools should turn to the book by Gallagher and the Readings (both by Allyn and Bacon, 1964).

Travers, Robert M.W. Essentials of learning: An overview for students of education. New York: The Macmillan Co., 1963.

Vreeland, Rebecca S., & Bidwell, Charles E. Classifying university departments: An approach to the analysis of their effects upon undergraduates' values and attitudes. Sociol. Educ., 1966 (Summer), 39, 276-287. After providing a valuable set of references upon the college "climate" and its impact upon students, the authors set forth the framework and report upon their study (one table, three figures). The analysis of departmental effects considers two major types of variables; namely, (1) departmental goals (technical, moral mixed), and (2) means available for achieving them (interest in the program, student-faculty interaction, student-peer interaction). The authors refer to Carl Hereford, Changing parental attitudes through group discussion (UT Press, 1963) for a summary of evidence that attitude and value change is related positively to intimacy and frequency, their two dimensions of student-faculty interaction.

Vreeland, Rebecca, & Bidwell, Charles. Organizational effects on student attitudes: A study of the Harvard Houses. Sociol. Educ., 1965 (Spring), 38, pp. 233-250. - Framework, design, variables, and findings are clearly organized and presented (7 tables and 1 chart). As hypothesized (in terms of power, affectivity, and environmental consistency of house organization), the direction of student value and attitude change was found to be linked most strongly with the extent of peer involvement in the house as well as the degree of consensus between staff and students.

Vygotsky, Leon S. Thought and language. Cambridge, Mass.: MIT Press, 1962. Paperback. - "The book shines with originality, penetration, and civilized breadth; it is the posthumous publication of a man who died in his prime after ten productive years as a psychologist."--Contemporary psychology.

Wallace, Walter L. Peer influences and undergraduates' aspirations for graduate study. Sociol. Educ., 1965 (Fall), 38, 375-392. The paper is a revision of an NORC-NIMH study report by Wallace (Peer groups and student achievement) in D.C. McClelland, et al., Talent and society (Princeton: Van Nostrand, 1963). Note the method, data, and dependence upon logical consistency of findings rather than their statistical significance in making substantive interpretations (one figure, 10 tables). Once socialization into particular student traditions have been shown to make a difference in student behavior, a new series of questions arises. They are asked on p. 392.

Wallach, Michael A., & Kogan, Nathan. Modes of thinking in young children. New York: Holt, Rinehart & Winston, 1965. - The book reports upon (1) the empirical validation of a distinction between intelligence and creativity as modes of cognitive activity, and (2) the psychological correlates of variability in the two modes, for boys and girls in subsamples by sex and category; e.g., HiC & HiI, HiC & LoI, LoC & HiI, and LoC & LoI. They find that modes of thinking are influenced by motivational determinants in a different way for boys than for girls. Anxiety, if it is not too intense, may enhance creative production--particularly among boys when the motivational state is somewhere between defensiveness (unconscious anxiety) and disruption (crippling anxiety). The research is neatly summarized in an article by the two authors; namely, A new look at the creativity-intelligence distinction, J. Pers., 1965 (Sept.), 33, 348-369. A single reprint may be obtained by requesting No. K-07-01 from Educational Testing Service, Princeton, N. J., 08540. (At the same time request a list of reprints available from ETS and a list of materials they can supply.)

Wattenberg, William W. (Ed.) Social deviancy among youth. 65th N.S.S.E. Yrbk., Pt. I. Chicago: University Chicago Press, 1966. - The reviewer noted some topics of interest; for example, four delinquency patterns (p. 13), "desirable forms of delinquency" and "forms of delinquency about which people are ambivalent" (pp. 60-65), theories of subcultural origins (pp. 87-102), "ego processes" (pp. 108-134, including five valuable figures), discontinuities in role expectations of girls (pp. 164-188), as well as chapters on programs designed to cope with potential or actual forms of deviant behavior.

Wright, Charles R. (UCLA) Success or failure in earning graduate degrees. Sociol. Educ., 1964 (Fall), 38, 73-97. - The study was designed in 1951 to test four broad types of factors hypothesized as determinants or contributors to graduate success or failure so as to avoid giving

ex post facto explanations. Initial interviews with 189 graduate students took place during the winter semester of 1951 (an 18 per cent sample) of 115 who said they wanted only a master's degree, 58 had earned only the MA by 1962, 11 others earned a doctorate (with or without the MA), and 46 failed to receive any graduate degree (i.e., 40 per cent attrition). Among the others, 60 wanted a doctorate and one thought he might. By 1962, 20 of them had earned the Ph.D., 8 had received an MA only, and 33 had failed to earn a new degree (although 19 of the 33 already had earned masters' degrees when they entered their departments in 1951). The attrition was 21 of 61 doctoral students by 1962, or 54 per cent of the original candidates. Neither academic endowment nor motivation (Table 3) suggests that <u>accomodation</u> (social adjustment and integration into the graduate school community) was related to success or failure. Age was a major non-academic status related to success. The basic literature underlying the research apparently had been searched carefully.